

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 8-K

CURRENT REPORT
PURSUANT TO SECTION 13 OR 15(d) OF
THE SECURITIES EXCHANGE ACT OF 1934

Date of Report (Date of earliest event reported): June 29, 2005

MKS Instruments, Inc.

(Exact name of registrant as specified in its charter)

Massachusetts	0-23621	04-2277512
----- (State or other jurisdiction of incorporation)	----- (Commission File Number)	----- (IRS Employer Identification No.)
90 Industrial Way, Wilmington, Massachusetts		01887
----- (Address of principal executive offices)		----- (Zip Code)

Registrant's telephone number, including area code: (978) 284-4000

(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e4(c))

ITEM 1.01. ENTRY INTO A MATERIAL DEFINITIVE AGREEMENT.

1. Employment Agreement with Leo Berlinghieri.

In connection with the change in management described in Item 5.02 below, effective as of July 1, 2005, MKS Instruments, Inc. (the "Company") entered into a new employment agreement with Leo Berlinghieri, the Company's President and Chief Executive Officer. The agreement sets a base annual salary of \$425,000, which salary is reviewed annually. Mr. Berlinghieri is also entitled to participate in a management incentive bonus plan and receive standard benefits including participation in a profit sharing and retirement savings plan, vacation days, life insurance and medical/dental insurance.

Mr. Berlinghieri is obligated to disclose and transfer to the Company inventions and to maintain the confidentiality of trade secrets and other confidential information. Pursuant to the agreement, during the term of employment and for a period of one year thereafter (or two years, if employment was terminated by Mr. Berlinghieri other than for "good reason"), Mr. Berlinghieri may not (i) engage in any competitive business or activity, (ii) work for or become a partner with any employee, officer or agent of the Company, or (iii) have any financial interest in or be a director, officer, 1% shareholder, partner, employee or consultant to any competitor of the Company. During the term of employment and for a period of two years after termination of employment, Mr. Berlinghieri may not (i) solicit any customer to become a customer, distributor or supplier of any other person or entity or to cease doing business with the Company or (ii) solicit or hire any employee or agent of the Company to terminate such person's employment or engagement with the Company or to work for a third party.

The term of employment for Mr. Berlinghieri is month to month with termination upon death or at the election of the Company if he fails or refuses to perform his duties or commits any acts not in the Company's best interest. If Mr. Berlinghieri's employment is terminated by the Company other than for failure or refusal to perform his obligations under the agreement or the commitment of acts not in the Company's interest, Mr. Berlinghieri shall continue to receive salary and certain benefits for 12 months after the date of such termination; and, if Mr. Berlinghieri's employment is terminated by the Company without "cause" or by Mr. Berlinghieri for "good reason" (each as defined in the agreement), within two years after a change in control of the Company, and certain other criteria are met, Mr. Berlinghieri shall continue to receive salary and certain benefits for 36 months after the date of such termination. The agreement provides for supplemental retirement benefits. The benefits vest upon the employee reaching both (i) specified ages (with full vesting at age 62) and (ii) 25 years of service with the Company, in each case while employed with the Company, or upon the employee's earlier death, disability, termination without cause (as defined in the agreement) or a qualifying termination in connection with a change in control (as defined in the agreement). The benefits are forfeited in the event of termination for cause. Upon retirement in accordance with the terms of the plan, Mr. Berlinghieri will receive annual payments equal to 50% of his final average pay (as defined in the agreement) for life, with 50% of such amount payable to his spouse for life after his death, or a lump sum payment of such aggregate amount, in accordance with actuarial tables.

The full text of the employment agreement with Mr. Berlinghieri is attached as Exhibit 99.1 to this Current Report on Form 8-K.

2. Employment Agreement with John R. Bertucci.

In connection with the change in management described in Item 5.02 below, the Company entered into an employment agreement, effective as of July 1, 2005, with John R. Bertucci. Mr. Bertucci's employment agreement provides for his resignation as Chief Executive Officer and his appointment as Executive Chairman. The agreement provides that if Mr. Bertucci resigns from his employment, then, subject to applicable law, the Corporation's by-laws and articles of organization and the directors' fiduciary duties, the Board of Directors shall nominate Mr. Bertucci for election as Class III director and consider Mr. Bertucci for appointment as Chairman of the Board, subject to eligibility requirements. The agreement sets a base annual salary of \$450,000, which salary is reviewed annually. Mr. Bertucci is also entitled to participate in a management incentive bonus plan and receive standard benefits including participation in a profit sharing and retirement savings plan, vacation days, life insurance and medical/dental insurance.

Mr. Bertucci is obligated to disclose and transfer to the Company inventions and to maintain the confidentiality of trade secrets and other confidential information. Pursuant to the agreement, during the term of employment and for a period of one year thereafter (or two years, if employment was terminated by Mr. Bertucci other than for "good reason", as defined in the agreement), Mr. Bertucci may not (i) manage or participate in a competing business, (ii) maintain an ownership of more than 1% in any competing business, (iii) solicit any customer of the Company for purchasing a competing product or diverting business or (iv) induce any customer or supplier to terminate its relationship with the Company. During the term of employment and for a period of two years after termination of employment, Mr. Bertucci may not induce any employee or agent to terminate such person's employment or engagement with the Company.

The term of employment for Mr. Bertucci shall continue until terminated by either party, or by death or disability. If Mr. Bertucci's employment is terminated by the Company without "cause" (as defined in the agreement), or by Mr. Bertucci for "good reason", Mr. Bertucci shall continue to receive salary and bonus for 36 months after the date of such termination (which payments shall be in a lump sum and grossed up for applicable taxes if such termination occurs within 2 years of a change of control in control of the Company), and additional employment benefits for his lifetime. If Mr. Bertucci otherwise terminates his employment, in exchange for his agreement to provide consulting services for the Company, he shall continue to receive salary and bonus for 18 months after the date of such termination and additional employment benefits for his lifetime. All payments made in connection with termination of employment shall be grossed up to cover any applicable excise tax. Mr. Bertucci and his spouse are also eligible to receive retiree medical for their lifetimes, upon meeting specified criteria. Retiree medical benefits are not available if Mr. Bertucci terminates his employment prior to age 65 (unless for "good reason") or is terminated by the Company for "cause". Upon receipt of the benefits, Mr. Bertucci will be responsible for paying \$1,500 in costs annually, and, until he is age 68, an additional portion of the costs.

The full text of the employment agreement with Mr. Bertucci is attached as Exhibit 99.2 to this Current Report on Form 8-K.

3. Employment Agreements with Ronald C. Weigner and William Stewart.

Effective as of July 1, 2005, the Company entered into new employment agreements with each of Ronald C. Weigner, the Company's Vice President and Chief Financial Officer, and William Stewart, the Company's Vice President and General Manager, Vacuum Products Group. Mr. Weigner's agreement sets a base annual salary of \$240,011 and Mr. Stewart's agreement sets a base annual salary of \$235,139, which salary is reviewed annually. The employees are also entitled to participate in a management incentive bonus plan and receive standard benefits including participation in a profit sharing and retirement savings plan, vacation days, life insurance and medical/dental insurance.

Each of Messrs. Weigner and Stewart is obligated to disclose and transfer to the Company inventions and maintain the confidentiality of trade secrets and other confidential information. Pursuant to the agreements, during the term of employment and for a period of one year thereafter (or two years, if employment was terminated by the employee other than for "good reason", as defined in the agreement), each of Messrs. Weigner and Stewart may not (i) engage in any competitive business or activity, (ii) work for, employ, become a partner with, or cause to be employed, any employee, officer or agent of the Company, or (iii) have any financial interest in or be a director, officer, 1% shareholder, partner, employee or consultant to any competitor of the Company. During the term of employment and for a period of two years after termination of employment, they may not (i) solicit any customer to become a customer, distributor or supplier of any other person or entity or to cease doing business with the Company or (ii) solicit or hire any employee or agent of the Company to terminate such person's employment or engagement with the Company or to work for a third party.

The term of employment is month to month with termination by either party or upon death. If Messrs. Weigner or Stewart's employment is terminated by the Company other than for failure or refusal to perform his obligations under the agreement or the commitment of acts not in the Company's interest, such employee shall continue to receive salary and certain benefits for 6 months after the date of such termination. The Company also provides retiree medical benefits to Messrs. Weigner and Stewart and their respective spouses, for their lifetimes, upon meeting specified criteria. Retiree medical benefits are not available if the employee terminates his employment with the Company prior to age 62 (unless such termination is for good reason, as defined in the employment agreement) or is terminated by the Company for cause. Upon receipt of the benefits, Messrs. Weigner and Stewart will each be responsible for paying \$1,500 in costs annually, and, until they are age 65, an additional portion of the costs.

In addition, the agreement with Mr. Weigner provides for supplemental retirement benefits upon the same terms as those described above with respect to Mr. Berlinghieri, except that the required age for full vesting for Mr. Weigner is age 65.

The full text of the employment agreements with Messrs. Weigner and Stewart are attached as Exhibits 99.3 and 99.4, respectively, to this Current Report on Form 8-K.

4. Management Incentive Program and Summary of Compensatory Arrangements.

In connection with his change in responsibilities described in Item 5.02 below, Mr. Bertucci's target bonus under the Company's 2005 Management Incentive Bonus was reduced from 75% of base earnings to 60% of base earnings. In addition, in connection with the entering into of the new employment agreements with Messrs. Berlinghieri and Bertucci described above, the Company has updated its Summary of Compensatory Arrangements with Executive Officers. The Summary of Compensatory Arrangements with Executive Officers also updates certain information with respect to 2005 compensatory arrangements that was not yet effective at the time the Summary was previously filed, as an exhibit to the Company's Annual Report on Form 10-K for the year ended December 31, 2005.

The full text of the 2005 Management Incentive Bonus Program and the Summary of Compensatory Arrangements with Executive Officers is attached as Exhibits 99.5 and 99.6 to this Current Report on Form 8-K.

ITEM 1.02. TERMINATION OF A MATERIAL DEFINITIVE AGREEMENT.

As of the effectiveness of the new employment agreement with Leo Berlinghieri described in Item 1.01 above on July 1, 2005, the prior employment agreement between the Company and Mr. Berlinghieri was terminated. Mr. Berlinghieri's terminated employment agreement had the same material terms as those in the new employment agreement, described in Item 1.01 above, except that his title changed, his salary increased, he has been provided with additional severance benefits, and his non-solicitation, and in certain circumstances, his non-competition obligations, were extended from one year to two years after any termination of employment.

As of the effectiveness of the new employment agreements with Ron Weigner and William Stewart described in Item 1.01 above on July 1, 2005, the prior employment agreements between the Company and each of those employees was terminated. The terminated employment agreements had the same material terms as those in the new employment agreements, described in Item 1.01 above, except that the new employment agreements also provide retiree medical benefits, and extend the employees' non-solicitation, and in certain circumstances, non-competition obligations from one year to two years after any termination of employment.

ITEM 5.02. DEPARTURE OF DIRECTORS OR PRINCIPAL OFFICERS; ELECTION OF DIRECTORS; APPOINTMENT OF PRINCIPAL OFFICERS.

(b) Departure of a Principal Executive Officer

On June 29, 2005, John R. Bertucci, the Company's Chairman and Chief Executive Officer, resigned as Chief Executive Officer, effective July 1, 2005. Mr. Bertucci shall serve as Executive Chairman of the Company.

(c) Appointment of a Principal Executive Officer

On June 29, 2005, the Board of Directors of the Company appointed Leo Berlinghieri, the Company's President and Chief Operating Officer, as President and Chief Executive Officer of the Company, effective as of July 1, 2005. Information relating to Mr. Berlinghieri required by Items 401(b), (d) and (e) and Item 404(a) of Regulation S-K was included in the Company's proxy statement filed with the Commission on March 23, 2005, and is hereby incorporated by reference.

A description of the material terms of the employment agreement with Mr. Berlinghieri is provided at Item 1.01 above. In addition, Mr. Berlinghieri participates in the Company's 2005 Management Incentive Program, under which he is eligible to receive a percentage of his base salary (with a target of 60%) if the Company attains specified corporate earnings per share during the year.

(d) Appointment of a Director

On June 29, 2005, the Board of Directors of the Company appointed Leo Berlinghieri as a Class I director of the Company, effective as of July 1, 2005, thereby filling a vacancy on the Board of Directors. Mr. Berlinghieri is not expected to serve on any committees of the Board. Information relating to Mr. Berlinghieri required by Item 404(a) of Regulation S-K was included in the Company's proxy statement filed with the Commission on March 23, 2005, and is hereby incorporated by reference.

The full text of the press release issued by the Company on June 30, 2005 announcing John R. Bertucci's resignation as Chief Executive Officer and appointment as Executive Chairman, and Leo Berlinghieri's appointment as Chief Executive Officer is attached as Exhibit 99.7 to this Current Report on Form 8-K.

ITEM 9.01 FINANCIAL STATEMENTS AND EXHIBITS

(c) Exhibits

Exhibit Number -----	Description -----
99.1	Employment Agreement, dated as of July 1, 2005 between MKS Instruments, Inc. and Leo Berlinghieri.
99.2	Employment Agreement, dated as of July 1, 2005 between MKS Instruments, Inc. and John R. Bertucci.
99.3	Employment Agreement, dated as of July 1, 2005 between MKS Instruments, Inc. and Ronald C. Weigner.
99.4	Employment Agreement, dated as of July 1, 2005 between MKS Instruments, Inc. and William Stewart.
99.5	Amendment to 2005 Management Incentive Bonus Program of MKS Instruments, Inc.
99.6	Summary of Compensatory Arrangements with Executive Officers
99.7	Press release dated June 30, 2005, announcing John R. Bertucci's resignation as Chief Executive Officer and appointment as Executive Chairman, and Leo Berlinghieri's appointment as Chief Executive Officer.

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Date: July 5, 2005

MKS Instruments, Inc.

By: /s/ Ronald C. Weigner

Ronald C. Weigner,
Vice President & Chief Financial Officer

EMPLOYMENT AGREEMENT

EMPLOYMENT AGREEMENT dated as of July 01, 2005 ("Employment Agreement"), by and between MKS Instruments, Inc., a Massachusetts Corporation (the "Corporation"), and Leo Berlinghieri, of North Andover, MA (the "Employee").

WHEREAS, the Corporation and the Employee entered into an Amended and Restated Employment Agreement dated July 30, 2004 (the "Original Employment Agreement"); and

WHEREAS, the Corporation intends to amend the terms of employment with the Employee as more particularly set forth herein; and

WHEREAS, the Corporation and the Employee intend that this Employment Agreement shall supercede the Original Employment Agreement and that as of the date hereof, the Original Employment Agreement shall be of no further force and effect;

NOW, THEREFORE, in consideration of the premises and the mutual promises contained herein, the Corporation and the Employee hereby agree as follows:

(1) Term of Employment: The Corporation hereby employs the Employee, and the Employee hereby accepts employment with the Corporation, for a period commencing as of July 01, 2005 and continuing from month to month thereafter until terminated as provided in this Section (1). Either the Corporation or the Employee may terminate the employment of the Employee under this Employment Agreement at any time after July 01, 2005 by giving written notice to the other party stating its or his election to terminate the employment of the Employee under this Employment Agreement. The employment of the Employee under this Employment Agreement shall terminate thirty (30) days after the date of receipt by the other party of such notice; provided, however, that the employment of the Employee under this Employment Agreement is subject to prior termination as hereinafter provided in Section (5). Notwithstanding the above, the Corporation shall be entitled, at its sole discretion, to waive the obligation of the Employee to continue to work during the thirty (30) day notice period.

(2) Capacity: The Employee shall serve as President and Chief Executive Officer of the Corporation and shall have such authority and will perform such duties as are delegated to him by the Board of Directors of the Corporation that are consistent with this position and his training and experience for the term of employment under this Employment Agreement.

(3) Extent of Services: During the term of employment of the Employee under this Employment Agreement, the Employee shall devote his full time to, and use his best efforts in the furtherance of, the business of the Corporation and shall not engage in any other business activity, whether or not such business activity is pursued for gain or any other pecuniary advantage, without the prior written consent of the Corporation.

(4) Compensation: In consideration of the services to be rendered by the Employee under this Employment Agreement, the Corporation agrees to pay, and the Employee agrees to accept, the following compensation:

(a) Base Salary: A base salary at the rate of four hundred twenty-five thousand dollars (\$425,000) per year for the term of employment of the Employee under this Employment Agreement. The base salary shall be payable in equal biweekly installments, subject to usual withholding requirements, and will be subject to any changes in pay policies that may be established by the Corporation. The base salary will be reviewed regularly according to the practices of the Corporation. No overtime pay will be paid to the Employee by the Corporation.

(b) Incentive: For each calendar year of the corporation during the term of employment of the Employee under this Employment Agreement, the Employee shall be entitled to participate in a Management Incentive Program pursuant to the terms of which the Employee may receive compensation in addition to his base salary if the Corporation attains its consolidated financial goals during such calendar year of the Corporation. The "targeted" additional compensation goal for the Employee shall be 60% of his base annual earnings. The Management Incentive Program, including the consolidated financial goals established by the Corporation for the calendar year and the formula to be used to determine the payment of amounts under the Management Incentive Program, will be communicated to the Employee in writing prior to the beginning of each calendar year of the Corporation. If there shall be any disagreement between the Corporation and the Employee as to the calculation of the Management

Incentive Bonus in any calendar year of the Corporation during the term of employment of the Employee under this Employment Agreement, the decision of the independent Public Accounting firm of the corporation as to the amount of the Management Incentive Bonus of the Corporation shall be conclusive and binding on the Corporation and the Employee. The Employee shall have no right to inspect any of the books, papers or records of the Corporation, except that the Employee shall be entitled to inspect any certificate of such independent public accounting firm as to the calculation of the Management Incentive Bonus of the Corporation in any calendar year of the Corporation during the term of employment of the Employee under this Employment Agreement. Incentive payments shall be payable to the Employee on or before March 31 after the end of each calendar year of the Corporation during the term of employment of the Employee under this Employment Agreement. The Employee will not receive any payment under the Management Incentive Program for any calendar year in which the Employee is not actively employed on the last day of that calendar year.

(c) MKS Instruments Profit Sharing and 401-K Plan: The Employee shall be eligible to become a participant under this plan of the Corporation on fulfilling the conditions set forth in the MKS Instruments Profit Sharing and 401-K Plan.

(d) Vacation: The Employee shall be entitled to an annual vacation leave of twenty-five (25) days at full pay during each year of this Employment Agreement, subject to the Employee arranging such vacation so as not to affect adversely the ability of the Corporation to transact its necessary business.

(e) Life Insurance: The Corporation shall provide, and pay all of the premiums for, term life insurance for the Employee during the term of employment of the Employee under this Employment Agreement in accordance with the term life insurance plan of the Corporation.

(f) Medical/Dental Insurance: The Corporation shall provide group medical/dental insurance for the Employee under the plans of the Corporation applicable to the Employee during the term of employment of the Employee under this Employment Agreement.

(g) Retirement Benefits: The Employee shall be eligible to participate in supplemental retirement benefits according to the terms and conditions set forth in Appendix A of this Employment Agreement.

(h) Other Benefits: The Corporation shall provide other benefits for the Employee under the plans of the Corporation applicable to the Employee during the term of employment of the Employee under this Employment Agreement.

(5) Termination: The employment of the Employee under this Employment Agreement shall terminate:

(a) On the expiration of the period of employment as provided in Section (1).

(b) Upon the death of the Employee.

(c) At the election of the Corporation (i) if the Employee shall refuse to perform the services required of him under this Employment Agreement, or (ii) if the Employee shall fail, or refuse, to perform the other covenants and agreements required of him under this Employment Agreement, or (iii) for "cause", which term shall mean conviction for the commission of a felony, willful failure by the Employee to perform his responsibilities to the Corporation, or willful misconduct by the Employee.

(6) Payment Upon Termination:

(a) If the employment of the Employee is terminated by the Corporation other than pursuant to Section 5 (c) hereof, the Corporation (i) shall continue to pay Employee the Base Salary in effect immediately prior to the time of such termination for twelve (12) months after the last full day Employee works under this Agreement at its normal payroll payment dates; (ii) shall reimburse Employee for the premiums (if any) he pays for continuation of life insurance should he elect to exercise the conversion feature of the Corporation's group life policy then in effect for twelve (12) months after the last full day Employee works under this Agreement; and (iii) continue to pay for such medical/dental/vision insurance as Employee may then receive for twelve (12) months after the last full day Employee works under this Agreement; (iv) continued participation in the Corporation's other benefit plans under the terms in effect immediately prior to termination for a period of 12 months (such payments of Base Salary and payments or

reimbursements of insurance premiums by the Corporation, the "Severance Benefits). Employee agrees that, (a) his eligibility for or entitlement to the foregoing Severance Benefits shall be subject to Employee's execution and delivery of a release, in such form as the Corporation may require, that, among other things, may be a general release of any and all claims Employee may have against Employer, (b) Employee shall have no rights or remedies in the event of his or her termination by the Corporation without Cause and other than as a result of Disability or death except for those set forth in this Agreement and (c) Employee's right to receive any of the foregoing Severance Benefits shall be expressly conditioned upon Employee's full compliance with the Corporation's Confidentiality Agreement, pursuant to its continued effectiveness, and Employee's full cooperation with the Corporation in both fulfilling the terms of this Agreement and the Corporation's Confidentiality Agreement and otherwise performing such actions as the Corporation may request in transitioning Employee from his employment with the Corporation and upon any breach of either such agreement by Employee, Employee's rights to any continued payment of Severance Benefits shall immediately cease and Employee shall be obligated to repay to the Corporation all amounts paid by the Corporation for the Severance Benefits except for the amount of \$1,000, which Employee shall be entitled to retain.

(b) If the employment of the Employee is terminated by death, the Corporation shall pay to the estate of the Employee an amount equal to 12 months Base Annual Salary at the rate in effect immediately prior to termination.

(c) In the event the employment of the Employee is terminated at the election of the Corporation pursuant to Section (5) (c) hereof, the Employee shall only be entitled to his base salary through the last day of actual employment or the date of termination, whichever is earlier.

(d) In the event the Employee voluntarily terminates his employment on the expiration of the period of employment as provided in Section (1), the Employee shall not be entitled to any compensation, and the Corporation shall have no obligation to pay the Employee any compensation, except as is provided in this Employment Agreement.

(e) in the event the Employee's employment is terminated without "cause" by the Corporation or by the Employee for Good Reason (as defined in Appendix A), upon or as a result of a Change in Control (as defined in

Appendix A) or at any time within 2 years following such a Change in Control, the Employee shall receive (i) 36 months Base Annual Salary, at the rate in effect immediately prior to termination; (ii) the Target Bonus under the MKS Management Incentive Plan for 36 months following termination at the rate in effect prior to termination (which foregoing Base Annual Salary and Target Bonus amounts shall be payable to Employee in a lump sum amount within 30 days of the date of termination, and shall be grossed up to account for applicable federal and state income taxes payable by Employee with respect to such amounts) (iii) continued participation in the Corporation's benefit plans under the terms in effect immediately prior to termination for a period of 36 months; (iv) and, continuation in the Corporation's medical, dental, vision and life insurance plans for a period of 36 months.

(7) Trade Secrets: The Employee covenants and agrees that he will communicate to the Corporation, and will not divulge or communicate to any other person, partnership, corporation or other entity without the prior written consent of the Corporation, any trade secrets of the Corporation or confidential information relating to the business of the Corporation or any one connected with the Corporation, and that such trade secrets and confidential information shall not be used by the Employee either on his own behalf or for the benefit of others or disclosed by the Employee to any one, except to the Corporation, during or after the term of employment of the Employee under this Employment Agreement.

(8) Inventions and Patents:

(a) The Employee shall make prompt full disclosure in writing to the Corporation of all inventions, improvements and discoveries, whether or not patentable, which the Employee conceives, devises, makes, discovers, develops, perfects or first reduces to practice, either alone or jointly with others, during the term of employment of the Employee under this Employment Agreement, which relate in any way to the fields, products or business of the Corporation, including development and research, whether during or out of the usual hours of work or on or off the premises of the Corporation or by use of the facilities of the Corporation or otherwise and whether at the request or suggestion of the Corporation or otherwise (all such inventions, improvements and discoveries being hereinafter called the "Inventions"), including any Inventions, whether

or not patentable, conceived, devised, made, discovered, developed, perfected or first reduced to practice by the Employee after the employment of the Employee under this Employment Agreement is terminated if the Inventions were conceived by the Employee during the term of employment of the Employee under this Employment Agreement. Any Inventions, whether or not patentable, conceived, devised, made, discovered, developed, perfected or first reduced to practice by the Employee within six (6) months of the date of termination of the employment of the Employee under this Employment Agreement shall be conclusively presumed to have been conceived during the term of employment of the Employee under this Employment Agreement.

(b) The Employee agrees that the Inventions shall be the sole and exclusive property of the Corporation.

(c) The Employee agrees to assist the Corporation and its nominees in every reasonable way (entirely at its or their expense) to obtain for the benefit of the Corporation letters patent for the Inventions and trademarks, trade names and copyrights relating to the Inventions, and any renewals, extensions or reissues thereof, in any and all countries, and agrees to make, execute, acknowledge and deliver, at the request of the Corporation, all written applications for letters patent, trademarks, trade names and copyrights relating to the Inventions and any renewals, extensions or reissues thereof, in any and all countries, and all documents with respect thereto, and all powers of attorney relating thereto and, without further compensation, to assign to the Corporation or its nominee all the right, title and interest of the Employee in and to such applications and to any patents, trademarks, trade names or copyrights which shall thereafter issue on any such applications, and to execute, acknowledge and deliver all other documents deemed necessary by the Corporation to transfer to or vest in the Corporation all of the right, title and interest of the Employee in and to the Inventions, and to such trademarks, trade names, patents and copyrights together with exclusive rights to make, use, license and sell them throughout the world.

(d) The Employee agrees that even though his employment is terminated under this Employment Agreement he will, at any time after such termination of employment, carry out and perform all of the agreements of Subsections (8) (a) and (8) (c) above, and will at any time and at all times cooperate with the Corporation in the prosecution and/or defense of any litigation which may arise in connection with the Inventions, provided, however, that should such services be rendered after termination

of employment of the Employee under this Employment Agreement, the Employee shall be paid reasonable compensation on a per diem basis.

(e) The Employee agrees to make and maintain adequate and current written records of all Inventions in the form of notes, sketches, drawings, or reports relating thereto, which records shall be and remain the property of, and available to, the Corporation at all times.

(f) The Employee agrees that he will, upon leaving the employment of the Corporation, promptly deliver to the Corporation all originals and copies of disclosures, drawings, prints, letters, notes, and reports either typed, handwritten or otherwise memorialized, belonging to the Corporation which are in his possession or under his control and the Employee agrees that he will not retain or give away or make copies of the originals or copies of any such disclosures, drawings, prints, letters, notes or reports.

(9) Property of Corporation: All files, records, reports, documents, drawings, specifications, equipment, and similar items relating to the business of the Corporation, whether prepared by the Employee or otherwise coming into his possession, shall remain the exclusive property of the Corporation and shall not be removed by the Employee from the premises of the Corporation under any circumstances whatsoever without the prior written consent of the Corporation.

(10) Non-Competition:

(a) During the term of employment of the Employee under this Employment Agreement, and during a period of one (1) year after termination of employment of the Employee under this Employment Agreement if such termination of employment was caused by the Corporation, (or by the Employee for Good Reason), or for a period of two (2) years after termination of employment of the Employee under this Employment Agreement if such termination of employment was caused by the Employee (other than for Good Reason), (i) the Employee shall not engage, either directly or indirectly, in any manner or capacity, in any business or activity which is competitive with any business or activity conducted by the Corporation; (ii) the Employee shall not work for, directly or indirectly, any person who was an employee, officer or agent of the Corporation or of any of its subsidiaries at any time during a

period of twelve (12) months prior to the termination of the employment of the Employee under this Employment Agreement nor shall the Employee form any partnership with, or establish any business venture in cooperation with, any such person which is competitive with any business or activity of the Corporation; (iii) the Employee shall not have any material financial interest, or participate as a director, officer, 1% stockholder, partner, employee, consultant or otherwise, in any corporation, partnership or other entity which is competitive with any business or activity conducted by the Corporation.

(b) The Corporation and the Employee agree that the services of the Employee are of a personal, special, unique and extraordinary character, and cannot be replaced by the Corporation without great difficulty, and that the violation by the Employee of any of his agreements under this Section (10) would damage the goodwill of the Corporation and cause the Corporation irreparable harm which could not reasonably or adequately be compensated in damages in an action at law, and that the agreements of the Employee under this Section (10) may be enforced by the Corporation in equity by an injunction or restraining order in addition to being enforced by the Corporation at law.

(c) In the event that this Section (10) shall be determined by any court of competent jurisdiction to be unenforceable by reason of its extending for too long a period of time or over too great a range of activities, it shall be interpreted to extend only over the maximum period of time or range of activities as to which it may be enforceable.

(11) Non-Solicitation: The Employee shall not, on his own behalf or in the service or on behalf of others, directly or indirectly:

(a) solicit, entice or induce any Customer (as defined below) to become a customer, distributor or supplier of any other person, firm or corporation with respect to products and/or services sold or under development by the Corporation during his employment at the Corporation, or to cease doing business with the Corporation, and the Employee shall not contact or approach any such person, firm or corporation for such purpose or authorize or knowingly approve the taking of such actions by any other person for a period of twenty-four (24) months from the date of the termination of employment of the Employee under this Employment Agreement; or

(b) solicit, recruit or hire (or attempt to solicit, recruit or hire) any employee, officer or agent of the Corporation or contractor engaged by the Corporation (whether or not such person is a full-time employee or whether or not such employment is pursuant to a written agreement or at-will) to terminate such person's employment or engagement with the Corporation or work for a third party other than the Corporation for a period of twenty-four (24) months after the date of the termination of employment of the Employee under this Employment Agreement, or engage in any activity that would cause such employee or contractor to violate any agreement with the Corporation, nor shall the Employee form any partnership with, or establish any business venture in cooperation with, any such person.

(c) For the purposes of this Section (11), a "Customer" means any person or entity which as of the date of the termination of employment of the Employee under this Employment Agreement was, within two (2) years prior to such time, a customer, distributor or supplier of the Corporation, and references to the Corporation shall be deemed to include any affiliate or subsidiary of the Corporation.

(12) Notice: Any and all notices under this Employment Agreement shall be in writing and, if to the Corporation, shall be duly given if sent to the Corporation by registered or certified mail, postage prepaid, return receipt requested, at the address of the Corporation set forth under its name below or at such other address as the Corporation may hereafter designate to the Employee in writing for the purpose, and, if to the Employee, shall be duly given if delivered to the Employee by hand or if sent to the Employee by registered or certified mail, postage prepaid, return receipt requested, at the address of the Employee set forth under his name below or at such other address as the Employee may hereafter designate to the Corporation in writing for the purpose.

(13) Assignment: The rights and obligations of the Corporation under this Employment Agreement shall inure to the benefit of, and shall be binding upon, the successors and assigns of the Corporation. The rights and obligations of the Employee under this Employment Agreement shall inure to the benefit of, and shall be binding upon, the heirs, executors and legal representatives of the Employee.

(14) Entire Agreement and Severability:

(a) This Employment Agreement, and the attached Appendix A, supersedes any and all other agreements, either oral or in writing, between the parties hereto with respect to the employment of the Employee by the Corporation and contains all of the covenants and agreements between the parties with respect to such employment. Each party to this Employment Agreement acknowledges that no representations, inducements, promises or agreements, oral or otherwise, have been made by any party, or any one acting on behalf of any party, which are not embodied herein, and that no other agreement, statement or promise not contained in this Employment Agreement, and the attached Appendix A, shall be valid and binding. Any modification of this Employment Agreement, and the attached Appendix A, will be effective only if it is in writing signed by both parties to this Employment Agreement.

(b) If any provision in this Employment Agreement is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remaining provisions shall nevertheless continue in full force and effect without being impaired or invalidated in any way.

(c) All pronouns used herein shall include the masculine, feminine, and neuter gender as the context requires.

(15) Governing Law: This Employment Agreement shall be governed by, and construed in accordance with, the laws of The Commonwealth of Massachusetts applicable to contracts made and to be performed entirely within The Commonwealth of Massachusetts without regard to its conflict of laws principles.

IN WITNESS WHEREOF, the parties hereto have executed, in The Commonwealth of Massachusetts, this Employment Agreement as a sealed instrument, all as of the day, month and year first written above.

MKS INSTRUMENTS, INC.

By: /s/ John R. Bertucci

Executive Chairman of the
Corporation's Board of Directors

90 Industrial Way
Wilmington, MA 01887

/s/ Leo Berlinghieri

Legal Signature

Leo Berlinghieri
Address:
99 Thistle Road

North Andover, MA 01845

APPENDIX A

SUPPLEMENTAL RETIREMENT BENEFITS

1. PURPOSE. (a) GENERAL: The purpose of this Appendix A is to provide Employee with supplemental retirement benefits to encourage his continued employment with the Corporation. Benefits will be payable only if Employee fully complies with all of the requirements of this Appendix A.

(b): For Benefit of Employee Only: Benefits under this Appendix A are provided for the benefit of Employee only. No other employee shall accrue any rights of any kind as a result of the existence of the arrangement described in this Appendix A. Supplemental retirement benefits may be provided to an employee only as specifically authorized by the Board of Directors of the Corporation.

2. DEFINITIONS. As used in this Appendix A, the following terms have the meanings set forth below, unless a different meaning is required by the context:

2.1. "Actuarially Equivalent" means a benefit of equivalent value to another benefit, determined on the following basis:

Interest Rate: The average annual interest rate on 10-year Treasury securities as published in the Internal Revenue Bulletin for the calendar quarter immediately preceding the calendar quarter in which the actuarially equivalent benefit is being determined plus 25 basis points; and

Mortality: The most recent "applicable mortality table" prescribed by Section 417(e)(3)(A)(ii) of the Internal Revenue Code (or a successor provision as determined by the Corporation).

2.2. "Base salary" means base salary as defined in the Employment Agreement, before any pre-tax salary reductions for participation in any benefits plan of the Corporation.

2.3. "Beneficiary" means one or more persons, trusts, estates or other entities, designated by Employee to receive death benefits under Sections 5.1(b), 5.2(b) or 6.1(b) of this Appendix A upon Employee's death. If Employee fails to designate a Beneficiary or if all designated

Beneficiaries predecease Employee or die prior to complete distribution of Employee's benefits under Section 5.1(b) or 5.2(b), then such death benefits shall be payable to the executor or personal representative of Employee's estate.

Employee shall designate his Beneficiary by completing and signing a beneficiary designation form prescribed by the Corporation, and returning it to the Corporation or its designated agent. Employee shall have the right to change a Beneficiary by completing, signing and otherwise complying with the terms of the beneficiary designation form and the Corporation's rules and procedures, as in effect from time to time. Upon the acceptance by the Corporation of a new beneficiary designation form, all Beneficiary designations previously filed shall be canceled. The Corporation shall be entitled to rely on the last beneficiary designation form filed by Employee and accepted by the Corporation prior to his or her death. No designation or change in designation of a Beneficiary shall be effective until received and acknowledged in writing by the Corporation or its designated agent. If the Corporation has any doubt as to the proper Beneficiary to receive payments pursuant to this Appendix A, the Corporation shall have the right, exercisable in its discretion, to withhold such payments until this matter is resolved to the Corporation's satisfaction.

2.4. "Bonus" means a bonus paid under the Corporation's Management Incentive Program.

2.5. "Change in Control" means the first to occur of any of the following events:

(a) Any "person" (as that term is used in Section 13 and 14(d)(2) of the Securities Exchange Act of 1934 ("Exchange Act")) becomes the beneficial owner (as that term is used in Section 13(d) of the Exchange Act), directly or indirectly, of fifty percent (50%) or more of the Corporation's capital stock entitled to vote in the election of directors;

(b) The shareholders of the Corporation approve any consolidation or merger of the Corporation, other than a consolidation or merger of the Corporation in which the holders of the common stock of the Corporation immediately prior to the consolidation or merger hold more than fifty percent (50%) of the common stock of the surviving corporation immediately after the consolidation or merger;

(c) The shareholders of the Corporation approve any plan or proposal for the liquidation or dissolution of the Corporation; or

(d) The shareholders of the Corporation approve the sale or transfer of all or substantially all of the assets of the Corporation to parties that are not within a

"controlled group of corporations" (as defined in Code Section 1563) in which the Corporation is a member.

2.6. "Corporation" means MKS Instruments, Inc.. and any corporation, trust, association or enterprise which is required to be considered, together with the Corporation, as one employer pursuant to the provisions of Sections 414(b), 414(c), 414(m) or 414(o) of the Code.

2.7. "Compensation" for any calendar year means the sum of Employee's Base Salary for such year plus any Bonus paid in such year.

2.8. "Early Retirement Benefit" means the Retirement benefit determined under Section 5.2 of this Appendix A upon Employee's Retirement prior to his Normal Retirement Date.

2.9. "Employment Agreement" means the Employment Agreement between Employee and the Corporation that contains this Appendix A.

2.10. "Final Average Pay" means, for purposes of Section 5 the average of Employee's three (3) highest years of Compensation during the ten (10) calendar year period immediately preceding the calendar year in which Employee Retires, and for purposes of determining death benefits under Section 6 the average of Employee's three (3) highest years of Compensation during the ten (10) calendar year period immediately preceding the calendar year containing Employee's date of death. The foregoing notwithstanding, any calendar year in which Employee has no Compensation from the Corporation shall be ignored in determining such ten calendar year period.

2.11. "Normal Retirement Age" means Employee's 62nd birthday.

2.12. "Normal Retirement Benefit" means the Retirement benefit determined under Section 5.1 of this Appendix A upon Employee's Retirement on or after his Normal Retirement Date.

2.13. "Normal Retirement Date" means the first day of the month in which Employee attains Normal Retirement Age.

2.14. "Permanent and Total Disability" means disability as defined in Section 216(i)(1) of the Social Security Act (in general, the inability to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment which can be expected to result in death or has lasted or can be expected to last for a continuous period of not less than

12 months, or blindness). Employee shall be conclusively presumed to be Permanently and Totally Disabled upon determination that he is disabled by the Social Security Administration.

2.15. "Retires" or "Retired" means Employee's termination of employment with the Corporation upon or after satisfying the vesting requirements of Section 4.1. Employee shall be deemed to have Retired with a fully vested Normal Retirement Benefit on the earliest of the date he becomes Permanently and Totally Disabled, the date the Corporation terminates Employee's employment with the Corporation for any reason other than Termination for Cause, the date of Employee's death while employed by the Corporation, or the date of Employee's qualifying termination of employment in connection with a Change in Control in accordance with the provisions of Section 7 of this Appendix A.

2.16. "Retirement Date" means the date Employee Retires or is deemed to have Retired in accordance with Section 2.15 of this Appendix A. The term "Retirement Date" shall include Employee's Early Retirement Date as defined in Section 5.2 of this Appendix A.

2.17. "Termination of Employment" means Termination for Cause, or Employee's voluntary severance from employment with the Corporation for any reason other than Retirement.

2.18. "Termination for Cause" means, solely for purposes of this Appendix A, termination of Employee's employment by the Corporation as a result of Employee's conviction for the commission of a felony, material breach of any employment or other agreements between Employee and the Corporation, or willful failure to perform the material responsibilities of his position with the Corporation.

2.19. "Trust" means the Trust established pursuant to Section 10 of this Appendix A.

3. ELIGIBILITY FOR RETIREMENT BENEFITS.

3.1. General: Subject to Sections 4.2, 4.3, 4.4, and 4.5 the Corporation shall pay the retirement benefits described in this Appendix A if Employee Retires from employment with the Corporation upon or after satisfying the vesting requirements set forth in Section 4.1.

3.2. Disability: Solely for purposes of determining eligibility for benefits payable under this Appendix A, Employee shall be deemed to be an employee of the Corporation during any period for which Employee receives benefits under any short term or long term disability plan of the Corporation but is not Permanently and Totally Disabled, and during such period Employee shall continue to accrue service for purposes of the vesting requirements set forth in

Section 4.1. If Employee remains disabled on the date he satisfies the vesting requirements set forth in Section 4.1, he shall be deemed to have Retired from employment from the Corporation on that date for purposes of this Appendix A. This Section 3.2 shall have no bearing on whether Employee remains an employee of the Corporation for any other purpose.

4. VESTING.

4.1 General: Except as provided in Sections 4.2, 4.3, 4.4, and 4.5, and subject to Section 10.2, Employee's benefits under this Appendix A shall be fully vested and nonforfeitable if Employee satisfies both (a) and (b) while employed with the Corporation:

(a) attains age 60, and

(b) has 25 years of service with the Corporation. Employee shall have 25 years of service on the 25th anniversary of Employee's original hire date.

The foregoing notwithstanding, Employee shall be fully vested in his benefit under this Appendix A on the earliest of the date (a) Employee dies while employed by the Corporation, (b) Employee becomes Permanently and Totally Disabled, (c) the Corporation terminates Employee's employment with the Corporation for any reason other than Termination for Cause as defined in Section 2.18 of this Appendix A, or (d) of Employee's qualifying termination of employment in connection with a Change in Control in accordance with the requirements of Section 7 of this Appendix A. Death benefits shall be determined in accordance with Section 6.

4.2. Termination for Cause: All benefits shall be forfeited, and no amount shall be payable under this Appendix A, in the event of Employee's Termination for Cause.

4.3. Compliance with Noncompete, Nondisclosure, and Nonsolicitation Agreements. All benefits under this Appendix A are expressly conditioned upon Employee's compliance with the terms of any noncompetition, nondisclosure, or nonsolicitation provisions contained in the Employment Agreement, or in any other agreement between Employee and the Corporation. All benefits payable under this Appendix A shall be forfeited, and no amount shall be payable, in the event Employee violates the terms of any such provisions. If Employee violates the terms of any such provisions, and benefit payments have commenced to Employee, any such payments shall cease, and Employee shall repay all previously paid benefits to the Corporation upon demand. If Employee fails to repay such amounts upon demand, the

Corporation shall have the right to take any action necessary to recover such payments from Employee.

4.4. Notice of Intent to Retire. Benefits payable under this Appendix A are specifically conditioned upon Employee providing to the Corporation written notice of Employee's intent to Retire at least six months prior to Employee's Retirement date. In the event Employee terminates employment with the Corporation for any reason other than death without satisfying the notice requirements of this Section 4.4 all benefits shall be forfeited, and no amount shall be payable under this Appendix A. The foregoing notwithstanding, the Corporation, in its sole and absolute discretion, may elect to waive the notice requirement of this Section 4.4. The foregoing notwithstanding, this Section 4.4 shall not apply to death benefits payable under Section 6 of this Appendix A, or to Retirement benefits payable under Section 5 as a result of Employee's deemed Retirement under Section 2.15 or Section 7 of this Appendix A.

4.5. Release. Benefits payable under this Appendix A (other than death benefits payable under Section 6) are specifically conditioned upon and provided in exchange for Employee signing a separation agreement that releases the Corporation from any liabilities that may have arisen as a result of Employee's employment and/or termination of employment with the Corporation. In the event Employee terminates employment with the Corporation for any reason other than death without satisfying the requirements of this Section 4.5 all benefits shall be forfeited, and no amount shall be payable under this Appendix A.

4.6. Termination of Employment Prior to Satisfying Vesting Requirements. No benefits are payable under this Appendix A upon Employee's Termination of Employment with the Corporation prior to satisfying the vesting requirements set forth in Section 4.1.

5. RETIREMENT BENEFITS.

5.1. Normal Retirement Benefit. This Section 5.1 describes the Retirement benefit payable by the Corporation in the event Employee Retires (or is deemed to have Retired in accordance with Section 2.15 or Section 7 of this Appendix A) on or after his Normal Retirement Date. Employee's Normal Retirement Benefit shall be paid in the form of an Actuarially Equivalent lump sum, as set forth in Section 5.3(a), unless Employee makes the election described in Section 5.3(b).

(a) Married on Retirement Date: If Employee is married on his Retirement Date, Employee's Normal Retirement Benefit shall be:

50% times Final Average Pay

payable annually for the life of Employee with 50% of such amount continuing after Employee's death to his spouse for her life. Payments shall commence as soon as administratively practicable following Employee's Retirement Date, and subsequent payments shall be made as soon as administrative practicable following each anniversary of Employee's Retirement Date (payments shall not, however, commence earlier than the date permitted by federal law). Solely for purposes of this Section 5.1, "Spouse" shall mean the spouse to whom Employee is married on his Retirement Date (regardless of whether that is the same spouse to whom he is married on his date of death), unless the Corporation is directed by a court of competent jurisdiction to treat someone else as Employee's "spouse." If the spouse to whom Employee is married on his Retirement Date does not survive Employee, no survivor death benefit shall be payable under this Section 5.1, without regard to whether employee is married on his date of death.

(b) Not Married on Retirement Date: If Employee is not married on his Retirement Date, Employee's Normal Retirement Benefit shall be:

50% times Final Average Pay

payable annually for the life of Employee with a ten year certain guarantee. Payments shall commence as soon as administratively practicable following Employee's Retirement Date, and subsequent payments shall be made as soon as administrative practicable following each anniversary of Employee's Retirement Date (payments shall not, however, commence earlier than the date permitted by federal law). If Employee dies before receiving 10 annual installments, the Corporation shall pay a lump sum benefit to Employee's Beneficiary that is Actuarially Equivalent to the additional benefit that would have been payable to Employee had he continued to receive annual installments up to a total of 10 annual installments.

5.2. Early Retirement Benefit. This Section 5.2 describes the Retirement benefit payable by the Corporation in the event Employee Retires prior to his Normal Retirement Date. Employee may Retire from employment with the Corporation prior to his Normal Retirement Date on the first day of any month coincident with or next following the date he satisfies the vesting requirements of section 4.1. The date on which Employee Retires under this Section 5.2 shall be his Early Retirement Date. Employee's Early Retirement Benefit shall be paid in the form of an Actuarially Equivalent lump sum, as set forth in Section 5.3(a), unless Employee makes the election described in Section 5.3(b).

(a) Married on Early Retirement Date: If Employee is married on his Early Retirement Date, Employee's Early Retirement Benefit shall be:

50% times Final Average Pay

multiplied by the applicable percentage as set forth in the following schedule:

Age at which Early Retirement Benefits Commence	62	61	60
Applicable Percentage	100%	90	80

payable annually for the life of Employee with 50% of such amount continuing after Employee's death to his spouse for her life. Payments shall commence as soon as administratively practicable following Employee's Early Retirement Date, and subsequent payments shall be made as soon as administrative practicable following each anniversary of Employee's Early Retirement Date (payments shall not, however, commence earlier than the date permitted by federal law). Solely for purposes of this Section 5.2, "Spouse" shall mean the spouse to whom Employee is married on his Early Retirement Date (regardless of whether that is the same spouse to whom he is married on his date of death), unless the Corporation is directed by a court of competent jurisdiction to treat someone else as Employee's "spouse." If the spouse to whom Employee is married on his Early Retirement Date does not survive Employee, no survivor death benefit shall be payable under this Section 5.2, without regard to whether employee is married on his date of death.

(b) Not Married on Early Retirement Date: If Employee is not married on his Early Retirement Date, Employee's Early Retirement Benefit shall be:

50% times Final Average Pay

multiplied by the applicable percentage as set forth in the following schedule:

Age at which Early Retirement Benefits Commence	62	61	60
Applicable Percentage	100%	90	80

payable annually for the life of Employee with a ten year certain guarantee. Payments shall commence as soon as administratively practicable following Employee's Early Retirement Date, and subsequent payments shall be made as soon as administrative practicable following each anniversary of Employee's Early Retirement Date (payments shall not, however, commence earlier than the date permitted by federal law). If Employee dies before receiving 10 annual installments, the Corporation shall pay a lump sum benefit to Employee's Beneficiary that is Actuarially Equivalent to the additional benefit that would have been payable to Employee had he continued to receive annual installments up to a total of 10 annual installments.

5.3. Form of Payment:

(a) Unless Employee makes the election described in Section 5.3(b) below, Employee's Normal Retirement Benefit or Early Retirement Benefit, determined in accordance with section 5.1 or 5.2 as applicable, shall be paid in the form of a single lump sum that is Actuarially Equivalent to such Normal Retirement Benefit or Early Retirement Benefit. Such lump sum shall be paid as soon as administratively practicable following Employee's retirement (or, if later, the earliest date permitted by Federal law).

(b) In lieu of payment of his Normal Retirement Benefit or Early Retirement Benefit in the form of a lump sum as described in Section 5.3(a), Employee may elect, in the manner prescribed by the Corporation, to receive payment of his retirement benefit in the form described in Section 5.1 or 5.2 as applicable. Any such election must be submitted to and accepted by the Corporation no later than the 13th month prior to Employee's Retirement Date.

5.4. Death While Employed by the Corporation. In the event Employee dies while employed by the Corporation, any benefits payable under this Appendix A shall be determined in accordance with Section 6.

6. DEATH WHILE EMPLOYED BY THE CORPORATION.

6.1. General. In the event Employee dies while employed by the Corporation the death benefit payable under this Appendix A shall be as follows:

(a) if Employee is married on his date of death, 50% of the lump sum that is Actuarially Equivalent to the Normal Retirement Benefit determined under Section 5.1(a) of this Appendix A, such lump sum benefit to be determined as if Employee Retired on his date of death after reaching Normal Retirement Age; or

(b) if Employee is not married on his date of death, 50% of the lump sum that is Actuarially Equivalent to the Normal Retirement Benefit determined under Section 5.1(b) of this Appendix A, such lump sum benefit to be determined as if Employee Retired on his date of death after reaching Normal Retirement Age.

The death benefit shall be payable in a lump sum as soon as administratively practicable following Employee's date of death.

6.2. Payee. This death benefit shall be payable to Employee's (a) surviving spouse if Employee is married on his date of death, or (b) Beneficiary if Employee is not married on his date of death. "Surviving spouse" for purposes of this Section 6.2 means the spouse to whom Employee is married on his date of death.

7. EFFECT OF A CHANGE IN CONTROL OF THE CORPORATION. Anything in this Appendix A to the contrary notwithstanding, this Section 7 shall apply in the event of a Change in Control. If, within three years after the date of a Change in Control Employee's employment with the Corporation is involuntarily terminated by the Corporation for any reason (other than Cause), or Employee voluntarily terminates employment with the Corporation for Good Reason, and employee is not otherwise eligible for Retirement, then Employee shall be deemed to have Retired with a fully vested Normal Retirement Benefit on the date of such termination of employment. Employee's Normal Retirement Benefit shall be determined as of such deemed Retirement Date, and shall be payable in a lump sum, calculated pursuant to Sections 5.1 and 5.3, as soon as administratively practicable following such deemed Retirement Date.

Solely for purposes of this Section 7, "Good Reason" shall mean termination of Employee's employment by Employee within 90 days following (i) a material diminution in Employee's positions, duties and responsibilities from those described in this Employment Agreement (ii) a reduction in Employee's Base Salary (other than a reduction which is part of a general salary reduction program affecting senior executives of the Corporation) (iii) a material reduction in the aggregate value of the pension and welfare benefits provided to Employee from those in effect prior to the Change in Control (other than a reduction which is proportionate to the reductions applicable to other senior executives pursuant to a cost-saving

plan that includes all senior executives), (iv) a material breach of any provision of this Employment Agreement by the Corporation, (v) the Corporation's requiring Employee to be based at a location that creates for Employee a one way commute in excess of 60 miles from his primary residence, except for required travel on the Corporation's business to an extent substantially consistent with the business travel obligations of Employee under this Employment Agreement. Notwithstanding the foregoing, a termination shall not be treated as a termination for Good Reason (i) if Employee shall have consented in writing to the occurrence of the event giving rise to the claim of termination for Good Reason or (ii) unless Employee shall have delivered a written notice to the Corporation within 30 days of his having actual knowledge of the occurrence of one of such events stating that he intends to terminate his employment for Good Reason and specifying the factual basis for such termination, and such event, if capable of being cured, shall not have been cured within 30 days of the receipt of such notice.

8. EFFECT OF TERMINATION OF EMPLOYMENT AND REHIRE. Upon Employee's termination of employment with the Corporation the benefit payable under this Appendix A, if any, shall be determined by the Corporation and such determination shall be conclusive and binding (subject to Section 14). If Employee is subsequently reemployed by the Corporation such reemployment, additional service, and additional compensation shall not result in a re-determination of the benefits due under this Appendix A. If, upon reemployment, Employee is receiving installment payments pursuant to Section 5 those payments shall not be suspended during any period of reemployment.

9. ADMINISTRATION.

9.1. Powers of the Corporation: The Board of Directors of the Corporation (the "Board") shall have the sole authority to act on behalf of the Corporation under this Appendix A (subject to Section 9.3), and shall have all the powers necessary to administer the benefits under this Appendix A, including, without limitation, the power to interpret the provisions of this Appendix A and to establish rules and prescribe any forms required to administer benefits under this Appendix A

9.2. Actions of the Board: All determinations, interpretations, rules, and decisions of the Board shall be conclusive and binding upon all persons having or claiming to have any interest or right under this Appendix A.

9.3. Delegation: The Board shall have the power to delegate specific duties and responsibilities to officers or other employees of the Corporation or other individuals or entities. Any delegation by the Board may allow further delegations by the individual or entity to whom the delegation is made. Any delegation may be rescinded by the Board at any time. Each person or entity to whom a duty or responsibility has been delegated shall be responsible for the exercise of such duty or responsibility and shall not be responsible for any act or failure to act of any other person or entity.

9.4. Reports and Records: The Board and those to whom the Board has delegated duties under Section 9.3 shall keep records of all their proceedings and actions and shall maintain books of account, records, and other data as shall be necessary for the proper administration of this Appendix A and for compliance with applicable law.

9.5. Costs: The costs of providing and administering the benefits under this Appendix A shall be borne by the Corporation.

10. UNFUNDED BENEFITS; ESTABLISHMENT OF TRUST.

10.1. Unfunded Status. This Appendix A shall be unfunded for tax purposes and for purposes of Title 1 of ERISA.

10.2. Establishment of Trust. The Corporation shall not be required to set aside any funds to discharge its obligations hereunder, but may set aside such funds to informally fund all or part of its obligations hereunder if it chooses to do so, including without limitation the contribution of assets to a "rabbi trust" (the Trust). Any setting aside of amounts, or acquisition of any insurance policy or any other asset, by the Corporation with which to discharge its obligations hereunder in trust or otherwise, shall not be deemed to create any beneficial ownership interest in Employee, his surviving spouse, or Beneficiary, and legal and equitable title to any funds so set aside shall remain in the Corporation, and any recipient of benefits hereunder shall have no security or other interest in such funds. The rights of Employee and his surviving spouse and Beneficiary(ies) under this Appendix A shall be no greater than the rights of a general unsecured creditor of the Corporation. Any and all funds so set aside by the Corporation shall remain the general assets of the Corporation, and subject to the claims of its general creditors, present and future.

10.3. Interrelationship of this Appendix A and the Trust. The provisions of this Appendix A shall govern the rights of Employee to receive distributions pursuant to the provisions of this Appendix A. The provisions of the Trust shall govern the rights of the Corporation,

Employee, and creditors of the Corporation to the assets transferred to the Trust. The Corporation shall at all times remain liable to carry out its obligations under this Appendix A.

10.4. Distributions from the Trust. The Corporation's obligations under this Appendix A may be satisfied with Trust assets distributed pursuant to the terms of the Trust, and any such distribution shall reduce the Corporation's obligation under this Appendix A.

11. PAYMENT OF BENEFIT FOR DISABLED OR INCAPACITATED PERSON. If the Corporation determines, in its discretion, that Employee or Employee's Beneficiary or surviving spouse is under a legal disability or is incapacitated in any way so as to be unable to manage his financial affairs, the Corporation shall make payment to such person or to his legal representative or to a friend or relative of such person as the Corporation considers advisable. Any payment under this Section 11 shall be a complete discharge of any liability for the making of such payment under this Appendix A. Nothing contained in this Section 11 however, should be deemed to impose upon the Corporation any liability for paying a benefit to any person who is under such a legal disability or is so incapacitated unless it has received notice of such disability or incapacity from a competent source.

12. NONASSIGNABILITY. Neither Employee nor any other person shall have any right to commute, sell, assign, transfer, pledge, anticipate, mortgage or otherwise encumber, transfer, hypothecate, alienate or convey in advance of actual receipt, the amounts, if any, payable hereunder, or any part thereof, which are, and all rights to which are expressly declared to be, unassignable and non-transferable. No part of the amounts payable shall, prior to actual payment, be subject to seizure, attachment, garnishment or sequestration for the payment of any debts, judgments, alimony or separate maintenance owed by Employee or any other person, be transferable by operation of law in the event of Employee's or any other person's bankruptcy or insolvency or be transferable to a spouse as a result of a property settlement or otherwise. The Corporation is authorized to make any payments directed by court order.

13. CLAIM PROCEDURE.

13.1. Presentation of Claim. Employee, or the surviving spouse of Employee after Employee's death, or Employee's Beneficiary (such Employee, surviving spouse, or Beneficiary being referred to below as a "Claimant") may deliver to the Corporation a written claim for a determination with respect to the amounts distributable to such Claimant under this Appendix A. If such a claim relates to the contents of a notice received by the Claimant, the claim must be made within sixty (60) days after such notice was received by the Claimant.

All other claims must be made within 180 days of the date on which the event that caused the claim to arise occurred. The claim must state with particularity the determination desired by the Claimant.

13.2. Notification of Decision. The Corporation shall consider a Claimant's claim within a reasonable time, but no later than ninety (90) days after receiving the claim. If the Corporation determines that special circumstances require an extension of time for processing the claim, written notice of the extension shall be furnished to the Claimant prior to the termination of the initial ninety (90) day period. In no event shall such extension exceed a period of ninety (90) days from the end of the initial period. The extension notice shall indicate the special circumstances requiring an extension of time and the date by which the Corporation expects to render the benefit determination. The Corporation shall notify the Claimant in writing:

(a) that the Claimant's requested determination has been made, and that the claim has been allowed in full; or

(b) that the Corporation has reached a conclusion contrary, in whole or in part, to the Claimant's requested determination, and such notice must set forth in a manner calculated to be understood by the Claimant:

(i) the specific reason(s) for the denial of the claim, or any part of it;

(ii) specific reference(s) to pertinent provisions of this Appendix A upon which such denial was based;

(iii) a description of any additional material or information necessary for the Claimant to perfect the claim, and an explanation of why such material or information is necessary;

(iv) an explanation of the claim review procedure set forth in Section 13.3 below; and

(v) a statement of the Claimant's right to bring a civil action under ERISA Section 502(a) following an adverse benefit determination on review.

13.3. Review of a Denied Claim. On or before sixty (60) days after receiving a notice from the Corporation that a claim has been denied, in whole or in part, a Claimant (or the Claimant's duly authorized representative) may file with the Corporation a written request for a review of

the denial of the claim. The Claimant (or the Claimant's duly authorized representative):

(a) may, upon request and free of charge, have reasonable access to, and copies of, all documents, records and other information relevant to the claim for benefits;

(b) may submit written comments or other documents; and/or

(c) may request a hearing, which the Corporation, in its sole discretion, may grant.

13.4. Decision on Review. The Corporation shall render its decision on review promptly, and no later than sixty (60) days after the Corporation receives the Claimant's written request for a review of the denial of the claim. If the Corporation determines that special circumstances require an extension of time for processing the claim, written notice of the extension shall be furnished to the Claimant prior to the termination of the initial sixty (60) day period. In no event shall such extension exceed a period of sixty (60) days from the end of the initial period. The extension notice shall indicate the special circumstances requiring an extension of time and the date by which the Corporation expects to render the benefit determination. In rendering its decision, the Corporation shall take into account all comments, documents, records and other information submitted by the Claimant relating to the claim, without regard to whether such information was submitted or considered in the initial benefit determination. The decision must be written in a manner calculated to be understood by the Claimant, and it must contain:

(a) specific reasons for the decision;

(b) specific reference(s) to the pertinent provisions of this Appendix A upon which the decision was based;

(c) a statement that the Claimant is entitled to receive, upon request and free of charge, reasonable access to and copies of, all documents, records and other information relevant (as defined in applicable ERISA regulations) to the Claimant's claim for benefits; and

(d) a statement of the Claimant's right to bring a civil action under ERISA Section 502(a).

13.5. LEGAL ACTION. A Claimant's compliance with the foregoing provisions of this Article 13 is a mandatory prerequisite to a Claimant's right to commence any legal action with respect

to any claim for benefits under this Appendix A.

14. TAX WITHHOLDING AND REPORTING; SECTION 280G EXCISE TAXES.

(a) General. The Corporation shall have the right to deduct any required withholding taxes from any payment made under this Appendix A. Except as provided in Section 14(b), the Corporation shall not be obligated to pay or reimburse Employee, or his surviving spouse or Beneficiary, for any income or other taxes or penalties that may be imposed on such person by the Internal Revenue Service or any state or other taxing authority as a result of benefits paid under this Appendix A.

(b) Excise Tax Payment. In the event that any payment or benefit (within the meaning of Section 280G(b)(2) of the Internal Revenue Code of 1986, as amended (the "Code")), to Employee or for his benefit paid or payable or distributed or distributable pursuant to the terms of this Employment Agreement (including this Appendix A) or otherwise in connection with, or arising out of, his employment with the Corporation or a Change in Control of the Corporation (a "Payment" or "Payments"), would be subject to the excise tax imposed by Section 4999 of the Code or any interest or penalties are incurred by the Employee with respect to such excise tax (such excise tax, together with any such interest and penalties, are hereinafter collectively referred to as the "Excise Tax"), then Employee will be entitled to immediately receive an additional payment (a "Gross-Up Payment") in an amount such that after payment by Employee of all taxes (including any interest or penalties, other than interest and penalties imposed by reason of Employee's failure to file timely a tax return or pay taxes shown due on his return, imposed with respect to such taxes and the Excise Tax), including any Excise Tax imposed upon the Gross-Up Payment, Employee retains an amount of the Gross-Up Payment equal to the Excise Tax imposed upon the Payments.

15. SUCCESSORS. The provisions of this Appendix A shall bind and inure to the benefit of the Corporation and its successors and assigns and Employee and Employee's surviving spouse and designated beneficiaries.

16. AMENDMENT. This Appendix A may be amended only by written agreement between Employee and the Corporation.

17. LEGEND

The securities represented by this supplemental retirement benefit have not been registered under the Securities Act of 1933, as amended, and may not be sold, transferred or otherwise disposed of in the absence of an effective registration

statement under such Act or an opinion of counsel satisfactory to the corporation to the effect that such registration is not required.

EMPLOYMENT AGREEMENT

THIS EMPLOYMENT AGREEMENT ("Agreement") is made and entered into as of this 1st day of July, 2005, by and between MKS INSTRUMENTS, INC., a Massachusetts corporation (the "Company"), and JOHN R. BERTUCCI of Lexington, MA ("Bertucci").

RECITALS

WHEREAS, the Company is a leading worldwide provider of instruments, components, subsystems and process control solutions that measure, control, power and monitor critical parameters of semiconductor and other advanced manufacturing processes;

WHEREAS, Bertucci is currently the Chief Executive Officer and the Chairman of the Board of Directors of the Company;

WHEREAS, as of the date of this Agreement, Bertucci desires to resign as Chief Executive Officer of the Company, but desires to remain the Chairman of the Board of Directors of the Company and continue to serve as an employee of the Company, subject to the terms of this Agreement;

WHEREAS, the Company desires to continue to employ Bertucci and to continue to obtain the benefit of Bertucci's service as the Executive Chairman of the Board of Directors, pursuant to the terms and conditions of this Agreement.

NOW THEREFORE, in consideration of the premises and of the mutual covenants and agreements hereinafter set forth, the parties hereto acknowledge and agree as follows:

PART ONE
NATURE AND TERM OF EMPLOYMENT

1.01 Transition and Employment. Bertucci and the Company hereby agree that Bertucci's resignation as the Chief Executive Officer shall be effective as of July 1, 2005. Subject to the terms of this Agreement, the Company hereby agrees to continue to employ Bertucci as Executive Chairman, and Bertucci hereby accepts such employment, with such duties and responsibilities as are described herein.

1.02 Term. Unless earlier terminated or unless extended pursuant to the provisions hereof, the term of Bertucci's employment shall begin on July 1, 2005, and shall continue until such time as it is terminated in accordance with the terms of Part Four of this Agreement.

1.03 Duties and Authority. The duties and authority of the Executive Chairman shall be as reasonably determined by the Board of Directors of the Company (the "Board") from time to time, and shall include the role of Chairman of the Board of Directors and be consistent with his position as Executive Chairman. Bertucci will devote substantially all of his business time to the Company. Subject to the terms of this Agreement and the Company's Code of Business Conduct and Ethics, Bertucci may participate in other business, civic, charitable, industry activities which do not materially interfere with the performance of his duties, may serve on

boards of directors of up to three (3) non-competing for-profit businesses, and may serve on additional boards of directors with the prior consent of the Board.

1.04 Place of Performance. Bertucci shall maintain an executive office at the Company's Wilmington, Massachusetts executive offices or other such location as may be mutually agreed to by the Board and Bertucci. Nothing in this section shall be construed to prohibit Bertucci from periodically performing his services for the Company at a location other than Wilmington, Massachusetts.

1.05 Nomination as Director; Appointment as Chairman. In the event that Bertucci resigns from his employment with the Company pursuant to Section 4.03 hereof other than for "good reason" (as defined in such section), then, upon Bertucci's request, the Board of Directors shall, subject to applicable law, the Company's then effective by-laws and articles of organization, and the fiduciary duties of the Board of Directors, (a) nominate Bertucci for election as a Class III director and (b) consider Bertucci for appointment as Chairman, in each case until such time as he is no longer eligible for such nomination as director pursuant to the Company's then effective Criteria for Nomination as a Director.

PART TWO COMPENSATION AND BENEFITS

2.01 Base Annual Salary. For the services rendered by Bertucci while employed by the Company, the Company shall pay Bertucci at an initial annual base salary rate of \$450,000 (as the same may be increased from time to time, the "Base Annual Salary"). At least annually, Bertucci's Base Annual Salary shall be reviewed and shall be subject to increase by the Board in its discretion at the time executive officer compensation is reviewed. The Base Annual Salary shall be payable to Bertucci in substantially equal installments in accordance with the Company's regular payroll practices.

2.02 Bonus. Bertucci shall be entitled to participate in the Company's Management Incentive Program and receive an annual cash bonus in return for performance of his duties under this Agreement. The targeted bonus under this program shall be determined at a rate of 60% of Base Annual Salary (the "Bonus"). Except as otherwise set forth herein, payment of the Bonus to Bertucci will occur when bonuses are normally paid by the Company.

2.03 General Employee Benefits. Bertucci shall be entitled to continue participation in the Company's current and future executive level benefits plans, programs, policies, practices and perquisites (not including the payment of retirement benefits or participation in executive stock option programs) while employed by the Company hereunder, including without limitation health insurance for Bertucci and Bertucci's immediate family, to the extent maintained by the Company for salaried employees generally, provided that Bertucci (or, as applicable, Bertucci's immediate family member) is eligible for participation under the terms of such plans, programs and arrangements. Bertucci shall also be entitled to receive expense reimbursement in accordance with the Company's expense reimbursement policy.

PART THREE
NONCOMPETITION AND CONFIDENTIALITY

3.01 Noncompetition. In addition to his obligations under the Company's Code of Business Conduct and Ethics, in consideration of Bertucci's employment hereunder, Bertucci hereby agrees that during the term of his employment hereunder and for a period of one (1) year thereafter, or, in the event that such termination was initiated by Bertucci other than for "good reason", for a period of two (2) years thereafter, he will not, singly, jointly, or as a member, employee, or agent of any partnership or as an officer, agent, employee, director or stockholder, or inventor of any other corporation or entity, or in any other capacity, directly or indirectly:

- (i) manage, operate, participate in, perform services for or otherwise carry on, assist or be connected with a Competing Business doing business anywhere within the respective territories in which the Company's business is then carried on;
- (ii) maintain an ownership interest of more than one percent (1%) in any Competing Business doing business anywhere within the respective territories in which the Company's business is then carried on
- (iii) solicit or contact (or assist in any solicitation or contact of) any customer of the Company with a view toward inducing the purchase of a Competing Product or otherwise diverting business from the Company;
- (iv) induce or attempt to persuade any customer or supplier of the Company to terminate or materially change such relationship;

For purposes of this Agreement:

"Competing Products" means products, processes or services of any person or organization other than the Company, in existence or under development, which are substantially the same as or which perform the same function or otherwise compete with any products, processes, or services developed, manufactured or sold by the Company during the time of Bertucci's employment with the Company or about which Bertucci acquires Confidential Information (defined below) through his relationship with the Company, including, but not limited to, the manufacture, sale, distribution or performance of services with respect to instruments, components, subsystems and process control solutions that measure, control, power and monitor critical parameters of semiconductor and other advanced manufacturing processes.

"Competing Business" means any person or organization engaged in, or planning to become engaged in, research, development, production, distribution, marketing, providing or selling of a Competing Product.

3.02 Non-solicitation of Employees. In consideration of Bertucci's employment hereunder, Bertucci hereby agrees that during the term of his employment hereunder and for a period of two (2) years thereafter, he will not, singly, jointly, or as a member, employee, or agent of any partnership or as an officer, agent, employee, director or stockholder, or inventor of any

other corporation or entity, or in any other capacity, directly or indirectly induce or attempt to persuade any employee or agent of the Company to terminate such employment or agency relationship or violate the terms of any agreement with the Company.

3.03 Confidentiality. Bertucci acknowledges that preservation of a continuing business relationship between the Company and its subsidiaries and its respective customers, representatives and employees is of critical importance to the continued business success of the Company, that it is the policy of the Company and its subsidiaries to guard as confidential the Confidential Information defined below, and that Bertucci will acquire Confidential Information and personal relationships with customers and prospective customers, which relationships may constitute the Company's primary relationships with such customers and prospective customers. In view of the foregoing, Bertucci agrees that, except as required for the performance of his duties under this Agreement, he will not during the term of his employment hereunder and thereafter, without the prior written consent of the Company, use for the benefit of himself or any third party or disclose to any third party any Confidential Information. Bertucci further agrees that if his employment by the Company is terminated for any reason, he will not take with him but will leave with the Company all records and papers and all matter of whatever nature which contain Confidential Information. For purposes of this Agreement, "Confidential Information" means any information, including any plan, drawing, specification, pattern, procedure, design, device, list or compilation, which relates to the present or planned business of the Company which has not been disclosed publicly by authorized representatives of the Company. Confidential Information may include, for example, inventions, marketing and sales plans or programs; customer and supplier information and lists; financial data; purchasing and pricing information; product engineering information; technological know-how; designs, plans or specifications regarding products and materials; manufacturing processes and techniques; regulatory approval strategies; computer programs, data, formulae and compositions; service techniques and protocols; and new product strategies, plans and designs. Confidential Information also includes all information received by Company under a confidentiality obligation to a third party.

3.04 Company's Right to Developed Intellectual Property. All Confidential Information, inventions, trade secrets or other intellectual property developed or conceived by Bertucci during Bertucci's employment the Company, whether before or after the date of this Agreement (collectively the "Intellectual Property"), shall be the sole and exclusive property of the Company without further compensation. Additionally, any Intellectual Property based upon the Company's Confidential Information and developed or conceived (whether solely or jointly) by Bertucci at any time either during or after the term of Bertucci's work with the Company shall be the property of the Company. Bertucci agrees to promptly notify and formally disclose to the Company all such Intellectual Property. Bertucci shall take such steps as are deemed necessary by the Company to maintain complete and current records thereof. Bertucci shall assign to the Company or its designees, Bertucci's entire right, title and interest in any Intellectual Property. Bertucci shall, at the Company's request and expense, make applications for domestic or foreign patents, execute all documents necessary thereto, and assist in securing, defending or enforcing any such title and right thereto. Bertucci hereby confirms that he is not subject to any agreements, covenants or restrictions that would prevent the Company from asserting full ownership rights to Intellectual Property developed or conceived by Bertucci as contemplated hereunder, or that would require the disclosure, assignment or licensing of any such Intellectual

Property to any third party. Bertucci further agrees not to assert any right or claim that would interfere with the Company's ownership or use of such Intellectual Property.

NOTICE TO BERTUCCI: THE COMPANY ACKNOWLEDGES AND HEREBY NOTIFIES BERTUCCI THAT NO PROVISION IN THIS AGREEMENT IS INTENDED TO REQUIRE ASSIGNMENT OF ANY OF BERTUCCI'S RIGHTS IN ANY INVENTION IF NO EQUIPMENT, SUPPLIES, FACILITIES OR CONFIDENTIAL INFORMATION OF THE COMPANY WAS USED, AND THE INVENTION WAS DEVELOPED ENTIRELY ON BERTUCCI'S OWN TIME, UNLESS THE INVENTION RELATES TO THE BUSINESS OF THE COMPANY OR TO THE COMPANY'S ACTUAL OR DEMONSTRABLY ANTICIPATED RESEARCH AND DEVELOPMENT, OR THE INVENTION RESULTS FROM ANY WORK PERFORMED BY BERTUCCI FOR THE COMPANY. BERTUCCI UNDERSTANDS AND AGREES THAT BERTUCCI SHALL BEAR THE BURDEN OF PROVING THAT AN INVENTION QUALIFIES WITH THE FOREGOING LIMITED EXCEPTIONS.

PART FOUR TERMINATION

4.01 Death or Disability. Upon the death or Disability of Bertucci his employment hereunder shall automatically terminate. For the purposes of this Agreement, the term "Disability" shall have the meaning set forth in Section 216(i)(1) of the Social Security Act, as amended from time to time.

4.02 Termination by Company. Company may terminate Bertucci's employment without "cause" by giving Bertucci ninety (90) days advance written notice. Company may terminate his employment for "cause" immediately upon written notice to Bertucci. For the purposes of this Agreement, "cause" shall be deemed to exist if Bertucci: (i) is convicted of, or pleads guilty or no contest to, a felony; (ii) engages in conduct that constitutes fraud, or gross misconduct that results in material harm to the Company; (iii) materially breaches the terms of this Agreement, which breach is not cured within thirty (30) days after written notice to Bertucci; (iv) engages in intentional and willful misconduct that subjects the Company to criminal or civil liability.

4.03 Termination by Bertucci. Bertucci may terminate his employment (including for purposes of retirement on or after age 65) under this Agreement by giving the Company ninety (90) days advance written notice. Subject to the conditions set forth below, Bertucci may terminate his employment hereunder for "good reason" following 30 days written notice to the Company. For purposes of this Agreement, "good reason" shall mean (i) a material diminution in Bertucci's positions, title, duties or responsibilities from those described in this Agreement, (ii) a reduction in Bertucci's Base Salary (other than a reduction which is part of a general salary reduction program affecting senior executives of the Company), (iii) a material reduction in the aggregate value of the benefits provided to Bertucci (other than a reduction which is proportionate to the reductions applicable to other senior executives pursuant to a cost-saving plan that includes all senior executives), (iv) a material breach of any provision of this Agreement by the Company, (v) the Company's requiring Bertucci to be based at a location that creates for Bertucci a one way commute in excess of 30 miles from his current primary residence, except for required travel on the Company's business to an extent substantially consistent with the business travel obligations of Bertucci under this Agreement. Notwithstanding the foregoing, a termination shall not be treated as a termination for "good

reason" (i) if Bertucci shall have consented in writing to the occurrence of the event giving rise to the claim of termination for "good reason" or (ii) unless Bertucci shall have delivered a written notice to the Company within 30 days of his having actual knowledge of the occurrence of one of such events stating that he intends to terminate his employment for "good reason" and specifying the factual basis for such termination, and such event, if capable of being cured, shall not have been cured within 30 days of the receipt of such notice.

4.04 Payments on Termination.

(a) General. Upon any termination of his employment hereunder in accordance with this Part Four, Bertucci shall receive: (i) Base Annual Salary through the termination date; (ii) the balance of any earned but as yet unpaid annual cash bonus or other incentive award for a prior year; (iii) accrued but unused vacation; (iv) vested benefits under Company benefit plans; and (v) benefit continuation/conversion rights as provided under Company benefit plans and/or as required by law. In the event that the Company terminates Bertucci's employment for "cause," he shall receive only the foregoing general payments.

(b) Death or Disability. In the event that termination of his employment results from Bertucci's death or Disability, in addition to the foregoing general payments described in 4.04(a) above, Bertucci shall receive an amount equal to 12 months Base Annual Salary at the rate in effect immediately prior to termination, plus a pro rata Target Bonus (determined by pro rating the Target Bonus for the year in which termination occurs through the date of death or the date of Disability). Such amounts shall be paid to Bertucci or, as applicable, Bertucci's estate or legal representative, within 30 days of the date of death or declaration of Disability. In addition, Bertucci and Bertucci's spouse receive Retiree Medical Benefits (as defined in 4.04(g) below) for the remainder of their respective lives in accordance with the terms set forth in 4.04(g) below.

(c) Termination by Company Without Cause or Resignation by Bertucci For Good Reason. In the event that termination of employment is by the Company without "cause" or by Bertucci for "good reason," then, upon Bertucci's execution of a mutually agreeable mutual release of all actual or potential claims, in addition to the foregoing general payments described in 4.04(a) above, Bertucci shall receive (i) 36 months Base Annual Salary, at the rate in effect immediately prior to termination, payable in substantially equal monthly installments, (ii) the Target Bonus for 36 months following termination at the rate in effect immediately prior to termination, payable when executive bonuses are normally paid; (iii) Retiree Medical Benefits for Bertucci and his spouse for the remainder of their respective lives in accordance with the terms set forth in Section 4.04(g) below, and (iv) continued payment of, and participation in, Bertucci's other, non-medical benefits under the terms in effect immediately prior to termination for the remainder of Bertucci's life.

(d) Termination by Bertucci. In the event that Bertucci elects to terminate his employment hereunder without "good reason" or retire as an employee of the Company, in addition to the foregoing general payments described in 4.04(a) above, Bertucci shall receive, in return for agreeing to be available for consultation with the Company for up to 10 hours per month during the first year following the date of Bertucci's termination or retirement, (i) 18 months Base Annual Salary at the rate in effect immediately prior to termination, payable in

substantially equal monthly installments; Retiree Medical Benefits for Bertucci and his wife for the remainder of their respective lives in accordance with the terms set forth in Section 4.04(g) below; and (iii) continued payment of, and participation in, Bertucci's other non-medical benefits under the terms in effect immediately prior to termination, for the remainder of Bertucci's life.

(e) Termination due to a Change in Control. Notwithstanding anything to the contrary in this Section 4.04, in the event Bertucci's employment is terminated without "cause" or by Bertucci for "good reason", upon or as a result of a Change in Control (as hereinafter defined) or at any time within 2 years following such a Change in Control, in addition to the foregoing general payments described in 4.04(a) above, but in lieu of the payments provided for in 4.04(c) above, Bertucci shall receive (i) 36 months Base Annual Salary, at the rate in effect immediately prior to termination; (ii) the Target Bonus for 36 months following termination at the rate in effect prior to termination (which foregoing Base Annual Salary and Target Bonus amounts shall be payable to Bertucci in a lump sum amount within 30 days of the date of termination, and shall be grossed up to account for applicable federal and state income taxes payable by Bertucci with respect to such amounts (iii) Retiree Medical Benefits for Bertucci and his wife for the remainder of their respective lives in accordance with the terms set forth in Section 4.04(g) below; and (iv) continued payment of, and participation in, Bertucci's other, non-medical benefits under the terms in effect immediately prior to termination for the remainder of Bertucci's life.

For purposes of this Agreement, "Change in Control" means the first to occur of any of the following events:

(i) Any "person" (as that term is defined in Section 13 and 14(d)(2) of the Securities Exchange Act of 1934, as amended ("Exchange Act")) becomes the beneficial owner (as that term is used in Section 13(d) of the Exchange Act), directly or indirectly, of fifty percent (50%) or more of the Company's capital stock entitled to vote in the election of directors;

(ii) The shareholders of the Company approve any consolidation or merger of the Corporation, other than a consolidation or merger of the Company in which the holders of the common stock of the Company immediately prior to the consolidation or merger hold more than fifty percent (50%) of the common stock of the surviving corporation immediately after the consolidation or merger;

(iii) The shareholders of the Company approve any plan or proposal for the liquidation or dissolution of the Company; or

(iv) The shareholders of the Company approve the sale or transfer of all or substantially all of the assets of the Corporation to parties that are not within a "controlled group of corporations" (as defined in Section 1563 of the Internal Revenue Code of 1986, as amended) in which the Company is a member.

(f) Gross-up Payment.

(i) All payments and benefits provided to Bertucci by Company are intended to be reasonable compensation for services by Bertucci, and the Company intends that Bertucci receives the full economic benefit of such payments and benefits. In the event that it is

determined that any payment or benefit provided by Company to or for the benefit of Bertucci, either under this Agreement or otherwise, whether paid before or after the date of this Agreement, and regardless of under what plan or arrangement it was made, will be subject to the excise tax imposed by section 4999 of the Code or any successor provision ("section 4999"), Company will, prior to the date on which any amount of the excise tax must be paid or withheld, make an additional lump-sum payment (the "gross-up payment") to Bertucci. The gross-up payment will be sufficient, after giving effect to all federal, state and other taxes and charges (including interest and penalties, if any) with respect to the gross-up payment, to make Bertucci whole for all taxes (including withholding taxes) and any associated interest and penalties, imposed under or as a result of section 4999.

(ii) Determination under this 4.04(f) will be made by the Company's tax accountant unless Bertucci has reasonable objections to the use of that firm, in which case the determinations will be made by a comparable firm chosen by Bertucci after consultation with Company (the firm making the determinations to be referred to as the "Firm"). The determinations of the Firm will be binding upon Company and Bertucci except as the determinations are established in resolution (including by settlement) of a controversy with the Internal Revenue Service to have been incorrect. All fees and expenses of the Firm will be paid by Company.

(iii) If the Internal Revenue Service asserts a claim that, if successful, would require Company to make a gross-up payment or an additional gross-up payment, Company and Bertucci will cooperate fully in resolving the controversy with the Internal Revenue Service. Company will make or advance such gross-up payments as are necessary to prevent Bertucci from having to bear the cost of payments made to the Internal Revenue Service in the course of, or as a result of, the controversy. The Firm will determine after resolution of the controversy whether any advances must be returned by Bertucci to Company. Company will bear all expenses of the controversy and will gross Bertucci up for any additional taxes that may be imposed upon Bertucci as a result of its payment of such expenses.

(iv) The Company's obligations under this 4.04(f) shall survive the termination of Bertucci's employment and any termination of this Agreement.

(g) Retiree Medical Benefits.

(i) Eligibility. The Employee's eligibility to receive the retiree medical benefits set forth in this 4.04(g) (the "Retiree Medical Benefits") is contingent upon (a) the Employee's compliance with all of the material terms and conditions contained in this Employment Agreement, (b) the Employee's execution, upon termination of employment (except in the case of death), of a separation agreement that releases the Corporation from any liabilities that may have arisen from employment or termination of employment with the Corporation, and (c) the occurrence of any of the following:

(A) the Employee retires from the Corporation when Employee is at least 65 years old, provided that, if Employee is under 68 at the time of such retirement, the terms of the benefits shall be subject to subsection 4.04(g)(iii) hereof; or

(B) the Employee is terminated by the Corporation without "cause" or, terminates his employment for "good reason"; provided that if the Employee is eligible at any time to receive comparable medical benefits from any subsequent employer, then the Employee shall not be eligible to receive the Retiree Medical Benefits during the time that he is eligible to receive such benefits from a subsequent employer, but will be eligible to receive the Retiree Medical Benefits thereafter; or

(C) prior to retirement, the Disability or death of the Employee.

If the Employee meets the eligibility criteria described above, he shall be considered an "Eligible Employee" hereunder. Spouses of Eligible Employees ("Eligible Spouses") shall also receive Medical Retirement Benefits. The Employee shall not be eligible for Medical Retirement Benefits if Employee is terminated by the Corporation for "cause".

(ii) Benefit Period and Types of Coverage. Eligible Employees and Eligible Spouses will each receive Retiree Medical Benefits for their respective lifetimes. During the 18 months immediately following termination of employment from the Corporation, Retiree Medical Benefits will be provided to Eligible Employee and Eligible Spouse through the Corporation's COBRA medical plan. Thereafter, the Corporation shall purchase fully insured non-group medical plans for the Eligible Employee and Eligible Spouse. The insurance plans purchased for the Eligible Employee and Eligible Spouses who are less than 65 years old shall be a high benefit plan comparable to the Corporation's group medical plan selected by the Employee immediately prior to termination of employment. The insurance plans purchased for Eligible Employees and Eligible Spouses who are 65 or more years old shall be Blue Cross/ Blue Shield's Medex Gold or other comparable high benefit medical plan.

(iii) Cost. The Eligible Employee (or surviving Eligible Spouse) will be required to contribute a fixed annual amount of \$1,500 for each year that he (or surviving Eligible Spouse) remains eligible for Retiree Medical Benefits. In addition to such \$1,500, if the Employee became an Eligible Employee pursuant to Section 4.04(g)(i)(A) above, then in addition to the \$1,500, the Employee (or surviving Eligible Spouse) shall be required to pay a portion of the expenses of the Retiree Medical Benefit as follows, based upon the age of the Eligible Employee:

Age at Date of Retirement -----	Percentage of Retiree Medical Benefit Costs to be Paid by Employee (or surviving spouse) at such age -----
65	30%
66	20%
67	10%
68 or more	0%

PART FIVE
MISCELLANEOUS

5.01 Assignment. Bertucci and Company acknowledge and agree that the covenants, terms and provisions contained in this Agreement constitute a personal employment contract and the rights and duties of the parties hereunder cannot be transferred, sold, assigned, pledged or hypothecated.

5.02 Entire Agreement. This Agreement contains the entire agreement between the parties relating to the subject matter hereof and shall not be modified except in writing by the parties hereto. Furthermore, the parties hereto specifically agree that all prior agreements, whether written or oral, relating to Bertucci's employment by the Company shall be of no further force or effect from and after the date hereof.

5.03 Severability. If any phrase, clause or provision of this Agreement is declared invalid or unenforceable by a court or arbitrator of competent jurisdiction, such phrase, clause or provision shall be deemed severed from this Agreement, but will not affect any other provisions of this Agreement, which shall otherwise remain in full force and effect. If any restriction or limitation in this Agreement is deemed to be unreasonable, onerous and unduly restrictive by a court or arbitrator of competent jurisdiction, it shall not be stricken in its entirety and held totally void and unenforceable, but shall remain effective to the maximum extent permissible within reasonable bounds.

5.04 Notices. Any notice, request or other communication required to be given pursuant to the provisions hereof shall be in writing and shall be deemed to have been given when delivered in person or three (3) days after being deposited in the United States mail, certified or registered, postage prepaid, return receipt requested and addressed to the party at its or his last known address. The address of any party may be changed by written notice to the other party duly served in accordance herewith.

5.05 Amendment or Waiver. No amendment, modification or waiver of any term, condition, right or remedy hereunder shall be effective for any purpose unless specifically set forth in a writing signed by the party to be bound thereby. The waiver by the Company or Bertucci of any breach of any term or condition of this Agreement shall not be deemed to constitute the waiver of any other breach of the same or any other term or condition hereof.

5.06 Indemnification. For such purposes, the Company shall maintain a commercially reasonable amount of directors and officers liability insurance coverage which shall be effective during Bertucci's employment and thereafter.

5.07 Governing Law. This Agreement and the enforcement thereof shall be governed and controlled in all respects by the internal laws of the Commonwealth of Massachusetts, without application of conflicts of law principles.

5.08 Arbitration. Any controversy or claim arising out of, or relating to, this Agreement or the breach thereof shall be settled by binding arbitration in accordance with the American Arbitration Association National Rules for Resolution of Employment Disputes then in effect in the Commonwealth of Massachusetts, and judgment upon any arbitration award may

be entered into in any court having jurisdiction thereof. The arbitration shall be held in Wilmington, Massachusetts. The Company shall bear the cost of any such arbitration.

5.09 Binding Agreement. This Agreement shall be binding upon and inure to the benefit of the parties hereto and their heirs, legatees, personal representatives, successors, and permitted assigns.

5.10 Headings / Counterparts. The headings of the parts and sections of this Agreement are inserted for convenience of reference only and shall not be deemed a part of, or affect the construction or interpretation of, any provision hereof. This Agreement may be executed in two or more counterparts, each of which shall be deemed to be an original, and all such counterparts together shall constitute one and the same instrument.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed, effective as of the date first herein above written.

EXECUTIVE:

/s/ John R. Bertucci

John R. Bertucci

COMPANY:

MKS INSTRUMENTS, INC.

By: /s/ Leo Berlinghieri

Print Name: Leo Berlinghieri
Title: President

EMPLOYMENT AGREEMENT

EMPLOYMENT AGREEMENT dated as of July 1, 2005 ("Employment Agreement"), by and between MKS Instruments, Inc., a Massachusetts Corporation (the "Corporation"), and Ronald C. Weigner, of Sudbury, MA (the "Employee").

WHEREAS, the Corporation and the Employee entered into an Amended and Restated Employment Agreement dated July 30, 2004 (the "Original Employment Agreement"); and

WHEREAS, the Corporation intends to provide certain retiree medical benefits to the Employee as more particularly set forth herein; and

WHEREAS, the Corporation and the Employee intend that this Employment Agreement shall supercede the Original Employment Agreement and that as of the date hereof, the Original Employment Agreement shall be of no further force and effect;

NOW, THEREFORE, in consideration of the premises and the mutual promises contained herein, the Corporation and the Employee hereby agree as follows:

(1) Term of Employment: The Corporation hereby employs the Employee, and the Employee hereby accepts employment with the Corporation, for a period commencing as of July 1, 2005 and continuing from month to month thereafter until terminated as provided in this Section (1). Either the Corporation or the Employee may terminate the employment of the Employee under this Employment Agreement at any time after July 1, 2005 by giving written notice to the other party stating its or his election to terminate the employment of the Employee under this Employment Agreement. The employment of the Employee under this Employment Agreement shall terminate thirty (30) days after the date of receipt by the other party of such notice; provided, however, that the employment of the Employee under this Employment Agreement is subject to prior termination as hereinafter provided in Section (5). Notwithstanding the above, the Corporation shall be entitled, at its sole discretion, to waive the obligation of the Employee to continue to work during the thirty (30) day notice period.

(2) Capacity: The Employee shall serve as Vice President and Chief Financial Officer of the Corporation and shall have such authority and will perform such duties as are delegated to him by the CEO & President of the Corporation or his designee that are consistent with this position and his training and experience for the term of employment under this Employment Agreement.

(3) Extent of Services: During the term of employment of the Employee under this Employment Agreement, the Employee shall devote his full time to, and use his best efforts in the furtherance of, the business of the Corporation and shall not engage in any other business activity, whether or not such business activity is pursued for gain or any other pecuniary advantage, without the prior written consent of the Corporation.

(4) Compensation: In consideration of the services to be rendered by the Employee under this Employment Agreement, the Corporation agrees to pay, and the Employee agrees to accept, the following compensation:

(a) Base Salary: A base salary at the rate of two hundred forty thousand and eleven dollars (\$240,011) per year for the term of employment of the Employee under this Employment Agreement. The base salary shall be payable in equal biweekly installments, subject to usual withholding requirements, and will be subject to any changes in pay policies that may be established by the Corporation. The base salary will be reviewed regularly according to the practices of the Corporation. No overtime pay will be paid to the Employee by the Corporation.

(b) Incentive: For each calendar year of the corporation during the term of employment of the Employee under this Employment Agreement, the Employee shall be entitled to participate in a Management Incentive Program pursuant to the terms of which the Employee may receive compensation in addition to his base salary if the Corporation attains its consolidated financial goals during such calendar year of the Corporation. The "targeted" additional compensation goal for the Employee shall be 40% of his base annual earnings. The Management Incentive Program, including the consolidated financial goals established by the Corporation for the calendar year and the formula to be used to determine the payment of amounts under the Management Incentive Program, will be communicated to the Employee in writing prior to the beginning of each calendar year of the Corporation. If there shall be any disagreement between the Corporation and the Employee as to the calculation of the Management

Incentive Bonus in any calendar year of the Corporation during the term of employment of the Employee under this Employment Agreement, the decision of the independent Public Accounting firm of the corporation as to the amount of the Management Incentive Bonus of the Corporation shall be conclusive and binding on the Corporation and the Employee. The Employee shall have no right to inspect any of the books, papers or records of the Corporation, except that the Employee shall be entitled to inspect any certificate of such independent public accounting firm as to the calculation of the Management Incentive Bonus of the Corporation in any calendar year of the Corporation during the term of employment of the Employee under this Employment Agreement. Incentive payments shall be payable to the Employee on or before March 31 after the end of each calendar year of the Corporation during the term of employment of the Employee under this Employment Agreement. The Employee will not receive any payment under the Management Incentive Program for any calendar year in which the Employee is not actively employed on the last day of that calendar year.

(c) MKS Instruments Profit Sharing and Retirement Savings Plan: The Employee shall be eligible to become a participant under the profit sharing plan of the Corporation on fulfilling the conditions set forth in the MKS Instruments Profit Sharing and Retirement Savings Plan.

(d) Vacation: The Employee shall be entitled to an annual vacation leave of twenty-five (25) days at full pay during each year of this Employment Agreement, subject to the Employee arranging such vacation so as not to affect adversely the ability of the Corporation to transact its necessary business.

(e) Life Insurance: The Corporation shall provide, and pay all of the premiums for, term life insurance for the Employee during the term of employment of the Employee under this Employment Agreement in accordance with the term life insurance plan of the Corporation.

(f) Medical/Dental Insurance: The Corporation shall provide group medical/dental insurance for the Employee under the plans of the Corporation applicable to the Employee during the term of employment of the Employee under this Employment Agreement.

(g) Retirement Benefits: The Employee shall be eligible to participate in supplemental retirement benefits according to the terms and conditions set forth in Appendix A of this Employment Agreement.

(h) Other Benefits: The Corporation shall provide other benefits for the Employee under the plans of the Corporation applicable to the Employee during the term of employment of the Employee under this Employment Agreement.

(5) Termination: The employment of the Employee under this Employment Agreement shall terminate:

(a) On the expiration of the period of employment as provided in Section (1).

(b) Upon the death of the Employee.

(c) At the election of the Corporation (i) if the Employee shall refuse to perform the services required of him under this Employment Agreement, or (ii) if the Employee shall fail, or refuse, to perform the other covenants and agreements required of him under this Employment Agreement, or (iii) for "cause", which term shall mean conviction for the commission of a felony, willful failure by the Employee to perform his responsibilities to the Corporation, or willful misconduct by the Employee.

(6) Payment Upon Termination:

(a) If the employment of the Employee is terminated by the Corporation other than pursuant to Section 5 (c) hereof, the Corporation (i) shall continue to pay Employee the Base Salary in effect immediately prior to the time of such termination for six (6) months after the last full day Employee works under this Agreement at its normal payroll payment dates; (ii) shall reimburse Employee for the premiums (if any) he pays for continuation of life insurance should he elect to exercise the conversion feature of the Corporation's group life policy then in effect for six (6) months after the last full day Employee works under this Agreement; and (iii) continue to pay for such dental/vision insurance as Employee may then receive for six (6) months after the last full day Employee works under this Agreement, and (iv) to the extent the Employee is eligible pursuant to Section 6(e) hereof, shall provide Retiree Medical Benefits (such payments of Base Salary and payments or reimbursements of insurance premiums and Retiree

Medical Benefits by the Corporation, the "Severance Benefits"). Employee agrees that, (a) his eligibility for or entitlement to the foregoing Severance Benefits shall be subject to Employee's execution and delivery of a release, in such form as the Corporation may require, that, among other things, may be a general release of any and all claims Employee may have against Employer, (b) Employee shall have no rights or remedies in the event of his or her termination by the Corporation without Cause and other than as a result of Disability or death except for those set forth in this Agreement and (c) Employee's right to receive any of the foregoing Severance Benefits shall be expressly conditioned upon Employee's full compliance with the Confidentiality Agreement, pursuant to its continued effectiveness, and Employee's full cooperation with the Corporation in both fulfilling the terms of this Agreement and the Confidentiality Agreement and otherwise performing such actions as the Corporation may request in transitioning Employee from his employment with the Corporation and upon any breach of either such agreement by Employee, Employee's rights to any continued payment of Severance Benefits shall immediately cease and Employee shall be obligated to repay to the Corporation all amounts paid by the Corporation for the Severance Benefits except for the amount of \$1,000, which Employee shall be entitled to retain.

(b) If the employment of the Employee is terminated by death, the Corporation shall pay to the estate of the Employee the compensation which would otherwise be payable to the Employee at the end of the month in which his death occurs.

(c) In the event the employment of the Employee is terminated at the election of the Corporation pursuant to Section (5) (c) hereof, the Employee shall only be entitled to his base salary through the last day of actual employment or the date of termination, whichever is earlier.

(d) In the event the Employee voluntarily terminates his employment on the expiration of the period of employment as provided in Section (1), the Employee shall not be entitled to any compensation, and the Corporation shall have no obligation to pay the Employee any compensation, except as is provided in this Employment Agreement.

(e) Retiree Medical Benefits.

(i) Eligibility. The Employee's eligibility to receive the retiree medical benefits set forth hereunder (the "Retiree Medical Benefits") is contingent upon (a) the Employee's compliance with all of the material terms and conditions contained in this Employment Agreement, (b) the Employee's execution, upon termination of employment (except in the case of death), of a separation agreement that releases the Corporation from any liabilities that may have arisen from employment or termination of employment with the Corporation, and (c) the occurrence of any of the following:

(A) the Employee retires from the Corporation when Employee is at least 62 years old, provided that, if Employee is under 65 at the time of such retirement, the terms of the benefits shall be subject to subsection 6(e)(iii) hereof; or

(B) the Employee is terminated by the Corporation other than for "cause" or if Employee terminates his employment for Good Reason (as defined in Appendix A of this Employment Agreement within 3 years of a change in control (as defined in Appendix A of this Employment Agreement)); provided that if the Employee is eligible at any time to receive comparable medical benefits from any subsequent employer, then the Employee shall not be eligible to receive the Retiree Medical Benefits during the time that he is eligible to receive such benefits from a subsequent employer, but will be eligible to receive the Retiree Medical Benefits thereafter; or

(C) prior to retirement, the Disability (which shall mean disability as defined in Section 216(i)(1) of the Social Security Act) or death of the Employee.

If the Employee meets the eligibility criteria described above, he shall be considered an "Eligible Employee" hereunder. The Spouse of the Eligible Employee ("Eligible Spouse") shall also receive Medical Retirement Benefits. The Employee shall not be eligible for Medical Retirement Benefits if Employee is terminated by the Corporation for "cause".

(ii) Benefit Period and Types of Coverage. Eligible Employees and Eligible Spouses will each receive Retiree Medical Benefits for their respective lifetimes. During the 18 months immediately following termination of employment from the Corporation, Retiree Medical Benefits will be provided to the Eligible Employee and Eligible Spouse through the Corporation's COBRA medical plan. Thereafter, the Corporation shall purchase fully insured non-group medical plans for the Eligible Employee and Eligible Spouse. The insurance plans purchased for the Eligible Employee and/or Eligible Spouse who are less than 65 years old shall be a high benefit plan comparable to the Corporation's group medical plan selected by the Employee immediately prior to termination of employment. The insurance plans purchased for the Eligible Employee and/or Eligible Spouse who are 65 or more years old shall be Blue Cross/ Blue Shield's Medex Gold or other comparable high benefit medical plan.

(iii) Cost. The Eligible Employee (or surviving Eligible Spouse) will be required to contribute a fixed annual amount of \$1,500 for each year that he (or surviving Eligible Spouse) remains eligible for Retiree Medical Benefits. In addition to such \$1,500, if the Employee became an Eligible Employee pursuant to Section (a)(i) above, then in addition to the \$1,500, the Employee (or surviving Eligible Spouse) shall be required to pay a portion of the expenses of the Retiree Medical Benefit as follows, based upon the age of the Eligible Employee:

Age	Percentage of Retiree Medical Benefit Costs to be Paid by Employee (or surviving spouse) for Such Year
-----	-----
62	30%
63	20%
64	10%
65 or more	0%

(7) Trade Secrets: The Employee covenants and agrees that he will communicate to the Corporation, and will not divulge or communicate to any other person, partnership, corporation or other entity without the prior written consent of the Corporation, any trade secrets of the Corporation or confidential information relating to the business of the Corporation or any one connected with the Corporation, and that such trade secrets and confidential information shall not be used by the Employee either on his own behalf or for the benefit of others or disclosed by the Employee to any one, except to the Corporation, during or after the term of employment of the Employee under this Employment Agreement.

(8) Inventions and Patents:

(a) The Employee shall make prompt full disclosure in writing to the Corporation of all inventions, improvements and discoveries, whether or not patentable, which the Employee conceives, devises, makes, discovers, develops, perfects or first reduces to practice, either alone or jointly with others, during the term of employment of the Employee under this Employment Agreement, which relate in any way to the fields, products or business of the Corporation, including development and research, whether during or out of the usual hours of work or on or off the premises of the Corporation or by use of the facilities of the Corporation or otherwise and whether at the request or suggestion of the Corporation or otherwise (all such inventions, improvements and discoveries being hereinafter called the "Inventions"), including any Inventions, whether or not patentable, conceived, devised, made, discovered, developed, perfected or first reduced to practice by the Employee after the employment of the Employee under this Employment Agreement is terminated if the Inventions were conceived by the Employee during the term of employment of the Employee under this Employment Agreement. Any Inventions, whether or not patentable, conceived, devised, made, discovered, developed, perfected or first reduced to practice by the Employee within six (6) months of the date of termination of the employment of the Employee under this Employment Agreement shall be conclusively presumed to have been conceived during the term of employment of the Employee under this Employment Agreement.

(b) The Employee agrees that the Inventions shall be the sole and exclusive property of the Corporation.

(c) The Employee agrees to assist the Corporation and its nominees in every reasonable way (entirely at its or their expense) to obtain for the benefit of the Corporation letters patent for the Inventions and trademarks, trade names and copyrights relating to the Inventions, and any renewals, extensions or reissues thereof, in any and all countries, and agrees to make, execute, acknowledge and deliver, at the request of the Corporation, all written applications for letters patent, trademarks, trade names and copyrights relating to the Inventions and any renewals, extensions or reissues thereof, in any and all countries, and all documents with respect thereto, and

all powers of attorney relating thereto and, without further compensation, to assign to the Corporation or its nominee all the right, title and interest of the Employee in and to such applications and to any patents, trademarks, trade names or copyrights which shall thereafter issue on any such applications, and to execute, acknowledge and deliver all other documents deemed necessary by the Corporation to transfer to or vest in the Corporation all of the right, title and interest of the Employee in and to the Inventions, and to such trademarks, trade names, patents and copyrights together with exclusive rights to make, use, license and sell them throughout the world.

(d) The Employee agrees that even though his employment is terminated under this Employment Agreement he will, at any time after such termination of employment, carry out and perform all of the agreements of Subsections (8) (a) and (8) (c) above, and will at any time and at all times cooperate with the Corporation in the prosecution and/or defense of any litigation which may arise in connection with the Inventions, provided, however, that should such services be rendered after termination of employment of the Employee under this Employment Agreement, the Employee shall be paid reasonable compensation on a per diem basis.

(e) The Employee agrees to make and maintain adequate and current written records of all Inventions in the form of notes, sketches, drawings, or reports relating thereto, which records shall be and remain the property of, and available to, the Corporation at all times.

(f) The Employee agrees that he will, upon leaving the employment of the Corporation, promptly deliver to the Corporation all originals and copies of disclosures, drawings, prints, letters, notes, and reports either typed, handwritten or otherwise memorialized, belonging to the Corporation which are in his possession or under his control and the Employee agrees that he will not retain or give away or make copies of the originals or copies of any such disclosures, drawings, prints, letters, notes or reports.

(9) Property of Corporation: All files, records, reports, documents, drawings, specifications, equipment, and similar items relating to the business of the Corporation, whether prepared by the Employee or otherwise coming into his possession, shall remain the exclusive property of the Corporation and shall not be removed by the Employee from the premises of the Corporation under any circumstances whatsoever

without the prior written consent of the Corporation.

(10) Non-Competition:

(a) During the term of employment of the Employee under this Employment Agreement, and during a period of one (1) year after termination of employment of the Employee under this Employment Agreement if such termination of employment was caused by the Corporation, (or by the Employee for Good Reason), or two (2) years after termination of employment of the Employee under this Employment Agreement if such termination of employment was caused by the Employee (other than for Good Reason), (i) the Employee shall not engage, either directly or indirectly, in any manner or capacity, in any business or activity which is competitive with any business or activity conducted by the Corporation; (ii) the Employee shall not work for or employ, directly or indirectly, or cause to be employed by another, any person who was an employee, officer or agent of the Corporation or of any of its subsidiaries at any time during a period of twelve (12) months prior to the termination of the employment of the Employee under this Employment Agreement nor shall the Employee form any partnership with, or establish any business venture in cooperation with, any such person which is competitive with any business or activity of the Corporation; and (iii) the Employee shall not have any material financial interest, or participate as a director, officer, 1% stockholder, partner, employee, consultant or otherwise, in any corporation, partnership or other entity which is competitive with any business or activity conducted by the Corporation.

(b) The Corporation and the Employee agree that the services of the Employee are of a personal, special, unique and extraordinary character, and cannot be replaced by the Corporation without great difficulty, and that the violation by the Employee of any of his agreements under this Section (10) would damage the goodwill of the Corporation and cause the Corporation irreparable harm which could not reasonably or adequately be compensated in damages in an action at law, and that the agreements of the Employee under this Section (10) may be enforced by the Corporation in equity by an injunction or restraining order in addition to being enforced by the Corporation at law.

(c) In the event that this Section (10) shall be determined by any court of competent jurisdiction to be unenforceable by reason of its extending for too long a

period of time or over too great a range of activities, it shall be interpreted to extend only over the maximum period of time or range of activities as to which it may be enforceable.

(11) Non-Solicitation: The Employee shall not, on his own behalf or in the service or on behalf of others, directly or indirectly:

(a) solicit, entice or induce any Customer (as defined below) to become a customer, distributor or supplier of any other person, firm or corporation with respect to products and/or services sold or under development by the Corporation during his employment at the Corporation, or to cease doing business with the Corporation, and the Employee shall not contact or approach any such person, firm or corporation for such purpose or authorize or knowingly approve the taking of such actions by any other person for a period of two (2) years from the date of the termination of employment of the Employee under this Employment Agreement; or

(b) solicit, recruit or hire (or attempt to solicit, recruit or hire) any employee, officer or agent of the Corporation or contractor engaged by the Corporation (whether or not such person is a full-time employee or whether or not such employment is pursuant to a written agreement or at-will) to terminate such person's employment or engagement with the Corporation or work for a third party other than the Corporation for a period of two (2) years after the date of the termination of employment of the Employee under this Employment Agreement, or engage in any activity that would cause such employee or contractor to violate any agreement with the Corporation, nor shall the Employee form any partnership with, or establish any business venture in cooperation with, any such person.

(c) For the purposes of this Section (11), a "Customer" means any person or entity which as of the date of the termination of employment of the Employee under this Employment Agreement was, within two (2) years prior to such time, a customer, distributor or supplier of the Corporation, and references to the Corporation shall be deemed to include any affiliate or subsidiary of the Corporation.

(12) Notice: Any and all notices under this Employment Agreement shall be in writing and, if to the Corporation, shall be duly given if sent to the Corporation by registered or certified mail, postage prepaid, return receipt requested, at the address of

the Corporation set forth under its name below or at such other address as the Corporation may hereafter designate to the Employee in writing for the purpose, and, if to the Employee, shall be duly given if delivered to the Employee by hand or if sent to the Employee by registered or certified mail, postage prepaid, return receipt requested, at the address of the Employee set forth under his name below or at such other address as the Employee may hereafter designate to the Corporation in writing for the purpose.

(13) Assignment: The rights and obligations of the Corporation under this Employment Agreement shall inure to the benefit of, and shall be binding upon, the successors and assigns of the Corporation. The rights and obligations of the Employee under this Employment Agreement shall inure to the benefit of, and shall be binding upon, the heirs, executors and legal representatives of the Employee.

(14) Entire Agreement and Severability:

(a) This Employment Agreement, and the attached Appendix A, supersedes any and all other agreements, either oral or in writing, between the parties hereto with respect to the employment of the Employee by the Corporation and contains all of the covenants and agreements between the parties with respect to such employment. Each party to this Employment Agreement acknowledges that no representations, inducements, promises or agreements, oral or otherwise, have been made by any party, or any one acting on behalf of any party, which are not embodied herein, and that no other agreement, statement or promise not contained in this Employment Agreement, and the attached Appendix A, shall be valid and binding. Any modification of this Employment Agreement, and the attached Appendix A, will be effective only if it is in writing signed by both parties to this Employment Agreement.

(b) If any provision in this Employment Agreement is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remaining provisions shall nevertheless continue in full force and effect without being impaired or invalidated in any way.

(c) All pronouns used herein shall include the masculine, feminine, and neuter gender as the context requires.

(15) Governing Law: This Employment Agreement shall be governed by, and construed in accordance with, the laws of The Commonwealth of Massachusetts applicable to contracts made and to be performed entirely within The Commonwealth of Massachusetts without regard to its conflict of laws principles.

(16) Arbitration. Any controversy or claim arising out of, or relating to, this Employment Agreement, or the breach hereof shall be settled by binding arbitration in accordance with the American Arbitration Association National Rules for Resolution of Employment Disputes then in effect in the Commonwealth of Massachusetts, and judgment upon any arbitration award may be entered into in any court having jurisdiction thereof. The arbitration shall be held in Wilmington, Massachusetts. The Company shall bear the cost of any such arbitration.

IN WITNESS WHEREOF, the parties hereto have executed, in The Commonwealth of Massachusetts, this Employment Agreement as a sealed instrument, all as of the day, month and year first written above.

MKS INSTRUMENTS, INC.

By: /s/ Leo Berlinghieri

CEO & President

90 Industrial Way
Wilmington, MA 01887

/s/ Ronald C. Weigner

Legal Signature

Ronald C. Weigner
Address:

55 Surrey Lane

Sudbury, MA 01776

APPENDIX A

SUPPLEMENTAL RETIREMENT BENEFITS

1. PURPOSE. (a) GENERAL: The purpose of this Appendix A is to provide Employee with supplemental retirement benefits to encourage his continued employment with the Corporation. Benefits will be payable only if Employee fully complies with all of the requirements of this Appendix A.

(b): For Benefit of Employee Only: Benefits under this Appendix A are provided for the benefit of Employee only. No other employee shall accrue any rights of any kind as a result of the existence of the arrangement described in this Appendix A. Supplemental retirement benefits may be provided to an employee only as specifically authorized by the Board of Directors of the Corporation.

2. DEFINITIONS. As used in this Appendix A, the following terms have the meanings set forth below, unless a different meaning is required by the context:

2.1. "Actuarially Equivalent" means a benefit of equivalent value to another benefit, determined on the following basis:

Interest Rate: The average annual interest rate on 10-year Treasury securities as published in the Internal Revenue Bulletin for the calendar quarter immediately preceding the calendar quarter in which the actuarially equivalent benefit is being determined plus 25 basis points; and

Mortality: The most recent "applicable mortality table" prescribed by Section 417(e)(3)(A)(ii) of the Internal Revenue Code (or a successor provision as determined by the Corporation).

2.2. "Base salary" means base salary as defined in the Employment Agreement, before any pre-tax salary reductions for participation in any benefits plan of the Corporation.

2.3. "Beneficiary" means one or more persons, trusts, estates or other entities, designated by Employee to receive death benefits under Sections 5.1(b), 5.2(b) or 6.1(b) of this Appendix A upon Employee's death. If Employee fails to designate a Beneficiary or if all designated Beneficiaries predecease Employee or die prior to complete distribution of Employee's benefits under Section 5.1(b) or 5.2(b), then such death benefits shall be payable to the executor or personal representative of Employee's estate.

Employee shall designate his Beneficiary by completing and signing a beneficiary designation form prescribed by the Corporation, and returning it to the Corporation or its designated agent. Employee shall have the right to change a Beneficiary by completing, signing and otherwise complying with the terms of the beneficiary designation form and the Corporation's rules and procedures, as in effect from time to time. Upon the acceptance by the Corporation of a new beneficiary designation form, all Beneficiary designations previously filed shall be canceled. The

Corporation shall be entitled to rely on the last beneficiary designation form filed by Employee and accepted by the Corporation prior to his or her death. No designation or change in designation of a Beneficiary shall be effective until received and acknowledged in writing by the Corporation or its designated agent. If the Corporation has any doubt as to the proper Beneficiary to receive payments pursuant to this Appendix A, the Corporation shall have the right, exercisable in its discretion, to withhold such payments until this matter is resolved to the Corporation's satisfaction.

2.4. "Bonus" means a bonus paid under the Corporation's Management Incentive Program.

2.5. "Change in Control" means the first to occur of any of the following events:

(a) Any "person" (as that term is used in Section 13 and 14(d)(2) of the Securities Exchange Act of 1934 ("Exchange Act")) becomes the beneficial owner (as that term is used in Section 13(d) of the Exchange Act), directly or indirectly, of fifty percent (50%) or more of the Corporation's capital stock entitled to vote in the election of directors;

(b) The shareholders of the Corporation approve any consolidation or merger of the Corporation, other than a consolidation or merger of the Corporation in which the holders of the common stock of the Corporation immediately prior to the consolidation or merger hold more than fifty percent (50%) of the common stock of the surviving corporation immediately after the consolidation or merger;

(c) The shareholders of the Corporation approve any plan or proposal for the liquidation or dissolution of the Corporation; or

(d) The shareholders of the Corporation approve the sale or transfer of all or substantially all of the assets of the Corporation to parties that are not within a "controlled group of corporations" (as defined in Code Section 1563) in which the Corporation is a member.

2.6. "Corporation" means MKS Instruments, Inc.. and any corporation, trust, association or enterprise which is required to be considered, together with the Corporation, as one employer pursuant to the provisions of Sections 414(b), 414(c), 414(m) or 414(o) of the Code.

2.7. "Compensation" for any calendar year means the sum of Employee's Base Salary for such year plus any Bonus paid in such year.

2.8. "Early Retirement Benefit" means the Retirement benefit determined under Section 5.2 of this Appendix A upon Employee's Retirement prior to his Normal Retirement Date.

2.9. "Employment Agreement" means the Employment Agreement between Employee and the Corporation that contains this Appendix A.

2.10. "Final Average Pay" means, for purposes of Section 5 the average of Employee's three (3) highest years of Compensation during the ten (10) calendar year period immediately preceding the calendar year in which Employee Retires, and for purposes of determining death benefits

under Section 6 the average of Employee's three (3) highest years of Compensation during the ten (10) calendar year period immediately preceding the calendar year containing Employee's date of death. The foregoing notwithstanding, any calendar year in which Employee has no Compensation from the Corporation shall be ignored in determining such ten calendar year period.

2.11. "Normal Retirement Age" means Employee's 65th birthday.

2.12. "Normal Retirement Benefit" means the Retirement benefit determined under Section 5.1 of this Appendix A upon Employee's Retirement on or after his Normal Retirement Date.

2.13. "Normal Retirement Date" means the first day of the month in which Employee attains Normal Retirement Age.

2.14. "Permanent and Total Disability" means disability as defined in Section 216(i)(1) of the Social Security Act (in general, the inability to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment which can be expected to result in death or has lasted or can be expected to last for a continuous period of not less than 12 months, or blindness). Employee shall be conclusively presumed to be Permanently and Totally Disabled upon determination that he is disabled by the Social Security Administration.

2.15. "Retires" or "Retired" means Employee's termination of employment with the Corporation upon or after satisfying the vesting requirements of Section 4.1. Employee shall be deemed to have Retired with a fully vested Normal Retirement Benefit on the earliest of the date he becomes Permanently and Totally Disabled, the date the Corporation terminates Employee's employment with the Corporation for any reason other than Termination for Cause, the date of Employee's death while employed by the Corporation, or the date of Employee's qualifying termination of employment in connection with a Change in Control in accordance with the provisions of Section 7 of this Appendix A.

2.16. "Retirement Date" means the date Employee Retires or is deemed to have Retired in accordance with Section 2.15 of this Appendix A. The term "Retirement Date" shall include Employee's Early Retirement Date as defined in Section 5.2 of this Appendix A.

2.17. "Termination of Employment" means Termination for Cause, or Employee's voluntary severance from employment with the Corporation for any reason other than Retirement.

2.18. "Termination for Cause" means, solely for purposes of this Appendix A, termination of Employee's employment by the Corporation as a result of Employee's conviction for the commission of a felony, material breach of any employment or other agreements between Employee and the Corporation, or willful failure to perform the material responsibilities of his position with the Corporation.

2.19. "Trust" means the Trust established pursuant to Section 10 of this Appendix A.

3. ELIGIBILITY FOR RETIREMENT BENEFITS.

3.1. General: Subject to Sections 4.2, 4.3, 4.4, and 4.5 the Corporation shall pay the retirement benefits described in this Appendix A if Employee Retires from employment with the Corporation upon or after satisfying the vesting requirements set forth in Section 4.1.

3.2. Disability: Solely for purposes of determining eligibility for benefits payable under this Appendix A, Employee shall be deemed to be an employee of the Corporation during any period for which Employee receives benefits under any short term or long term disability plan of the Corporation but is not Permanently and Totally Disabled, and during such period Employee shall continue to accrue service for purposes of the vesting requirements set forth in Section 4.1. If Employee remains disabled on the date he satisfies the vesting requirements set forth in Section 4.1, he shall be deemed to have Retired from employment from the Corporation on that date for purposes of this Appendix A. This Section 3.2 shall have no bearing on whether Employee remains an employee of the Corporation for any other purpose.

4. VESTING.

4.1 General: Except as provided in Sections 4.2, 4.3, 4.4, and 4.5, and subject to Section 10.2, Employee's benefits under this Appendix A shall be fully vested and nonforfeitable if Employee satisfies both (a) and (b) while employed with the Corporation:

(a) attains age 60, and

(b) has 25 years of service with the Corporation. Employee shall have 25 years of service on the 25th anniversary of Employee's original hire date.

The foregoing notwithstanding, Employee shall be fully vested in his benefit under this Appendix A on the earliest of the date (a) Employee dies while employed by the Corporation, (b) Employee becomes Permanently and Totally Disabled, (c) the Corporation terminates Employee's employment with the Corporation for any reason other than Termination for Cause as defined in Section 2.18 of this Appendix A, or (d) of Employee's qualifying termination of employment in connection with a Change in Control in accordance with the requirements of Section 7 of this Appendix A. Death benefits shall be determined in accordance with Section 6.

4.2. Termination for Cause: All benefits shall be forfeited, and no amount shall be payable under this Appendix A, in the event of Employee's Termination for Cause.

4.3. Compliance with Noncompete, Nondisclosure, and Nonsolicitation Agreements. All benefits under this Appendix A are expressly conditioned upon Employee's compliance with the terms of any noncompetition, nondisclosure, or nonsolicitation provisions contained in the Employment Agreement, or in any other agreement between Employee and the Corporation. All benefits payable under this Appendix A shall be forfeited, and no amount shall be payable, in the event Employee violates the terms of any such provisions. If Employee violates the terms of any such provisions, and benefit payments have commenced to Employee, any such payments shall cease, and Employee shall repay all previously paid benefits to the Corporation upon demand. If

Employee fails to repay such amounts upon demand, the Corporation shall have the right to take any action necessary to recover such payments from Employee.

4.4. Notice of Intent to Retire. Benefits payable under this Appendix A are specifically conditioned upon Employee providing to the Corporation written notice of Employee's intent to Retire at least six months prior to Employee's Retirement date. In the event Employee terminates employment with the Corporation for any reason other than death without satisfying the notice requirements of this Section 4.4 all benefits shall be forfeited, and no amount shall be payable under this Appendix A. The foregoing notwithstanding, the Corporation, in its sole and absolute discretion, may elect to waive the notice requirement of this Section 4.4. The foregoing notwithstanding, this Section 4.4 shall not apply to death benefits payable under Section 6 of this Appendix A, or to Retirement benefits payable under Section 5 as a result of Employee's deemed Retirement under Section 2.15 or Section 7 of this Appendix A.

4.5. Release. Benefits payable under this Appendix A (other than death benefits payable under Section 6) are specifically conditioned upon and provided in exchange for Employee signing a separation agreement that releases the Corporation from any liabilities that may have arisen as a result of Employee's employment and/or termination of employment with the Corporation. In the event Employee terminates employment with the Corporation for any reason other than death without satisfying the requirements of this Section 4.5 all benefits shall be forfeited, and no amount shall be payable under this Appendix A. 4.6. Termination of Employment Prior to Satisfying Vesting Requirements. No benefits are payable under this Appendix A upon Employee's Termination of Employment with the Corporation prior to satisfying the vesting requirements set forth in Section 4.1.

5. RETIREMENT BENEFITS.

5.1. Normal Retirement Benefit. This Section 5.1 describes the Retirement benefit payable by the Corporation in the event Employee Retires (or is deemed to have Retired in accordance with Section 2.15 or Section 7 of this Appendix A) on or after his Normal Retirement Date. Employee's Normal Retirement Benefit shall be paid in the form of an Actuarially Equivalent lump sum, as set forth in Section 5.3(a), unless Employee makes the election described in Section 5.3(b).

(a) Married on Retirement Date: If Employee is married on his Retirement Date, Employee's Normal Retirement Benefit shall be:

50% times Final Average Pay

payable annually for the life of Employee with 50% of such amount continuing after Employee's death to his spouse for her life. Payments shall commence as soon as administratively practicable following Employee's Retirement Date, and subsequent payments shall be made as soon as administrative practicable following each anniversary of Employee's Retirement Date (payments shall not, however, commence earlier than the date permitted by federal law). Solely for purposes of this Section 5.1, "Spouse" shall mean the spouse to whom Employee is married on his Retirement Date (regardless of whether that is the same spouse to whom he is married on

his date of death), unless the Corporation is directed by a court of competent jurisdiction to treat someone else as Employee's "spouse." If the spouse to whom Employee is married on his Retirement Date does not survive Employee, no survivor death benefit shall be payable under this Section 5.1, without regard to whether employee is married on his date of death.

(b) Not Married on Retirement Date: If Employee is not married on his Retirement Date, Employee's Normal Retirement Benefit shall be:

50% times Final Average Pay

payable annually for the life of Employee with a ten year certain guarantee. Payments shall commence as soon as administratively practicable following Employee's Retirement Date, and subsequent payments shall be made as soon as administrative practicable following each anniversary of Employee's Retirement Date (payments shall not, however, commence earlier than the date permitted by federal law). If Employee dies before receiving 10 annual installments, the Corporation shall pay a lump sum benefit to Employee's Beneficiary that is Actuarially Equivalent to the additional benefit that would have been payable to Employee had he continued to receive annual installments up to a total of 10 annual installments.

5.2. Early Retirement Benefit. This Section 5.2 describes the Retirement benefit payable by the Corporation in the event Employee Retires prior to his Normal Retirement Date. Employee may Retire from employment with the Corporation prior to his Normal Retirement Date on the first day of any month coincident with or next following the date he satisfies the vesting requirements of section 4.1. The date on which Employee Retires under this Section 5.2 shall be his Early Retirement Date. Employee's Early Retirement Benefit shall be paid in the form of an Actuarially Equivalent lump sum, as set forth in Section 5.3(a), unless Employee makes the election described in Section 5.3(b).

(a) Married on Early Retirement Date: If Employee is married on his Early Retirement Date, Employee's Early Retirement Benefit shall be:

50% times Final Average Pay

multiplied by the applicable percentage as set forth in the following schedule:

Age at which Early Retirement Benefits Commence	64	63	62	61	60
Applicable Percentage	90%	80	60	40	20

payable annually for the life of Employee with 50% of such amount continuing after Employee's death to his spouse for her life. Payments shall commence as soon as administratively practicable following Employee's Early Retirement Date, and subsequent payments shall be made as soon as administrative practicable following each anniversary of Employee's Early Retirement Date (payments shall not, however, commence earlier than the date permitted by

federal law). Solely for purposes of this Section 5.2, "Spouse" shall mean the spouse to whom Employee is married on his Early Retirement Date (regardless of whether that is the same spouse to whom he is married on his date of death), unless the Corporation is directed by a court of competent jurisdiction to treat someone else as Employee's "spouse." If the spouse to whom Employee is married on his Early Retirement Date does not survive Employee, no survivor death benefit shall be payable under this Section 5.2, without regard to whether employee is married on his date of death.

(b) Not Married on Early Retirement Date: If Employee is not married on his Early Retirement Date, Employee's Early Retirement Benefit shall be:

50% times Final Average Pay

multiplied by the applicable percentage as set forth in the following schedule:

Age at which Early Retirement Benefits Commence	64	63	62	61	60
Applicable Percentage	90%	80	60	40	20

payable annually for the life of Employee with a ten year certain guarantee. Payments shall commence as soon as administratively practicable following Employee's Early Retirement Date, and subsequent payments shall be made as soon as administrative practicable following each anniversary of Employee's Early Retirement Date (payments shall not, however, commence earlier than the date permitted by federal law). If Employee dies before receiving 10 annual installments, the Corporation shall pay a lump sum benefit to Employee's Beneficiary that is Actuarially Equivalent to the additional benefit that would have been payable to Employee had he continued to receive annual installments up to a total of 10 annual installments.

5.3. Form of Payment:

(a) Unless Employee makes the election described in Section 5.3(b) below, Employee's Normal Retirement Benefit or Early Retirement Benefit, determined in accordance with section 5.1 or 5.2 as applicable, shall be paid in the form of a single lump sum that is Actuarially Equivalent to such Normal Retirement Benefit or Early Retirement Benefit. Such lump sum shall be paid as soon as administratively practicable following Employee's retirement (or, if later, the earliest date permitted by Federal law).

(b) In lieu of payment of his Normal Retirement Benefit or Early Retirement Benefit in the form of a lump sum as described in Section 5.3(a), Employee may elect, in the manner prescribed by the Corporation, to receive payment of his retirement benefit in the form described in Section 5.1 or 5.2 as applicable. Any such election must be submitted to and accepted by the Corporation no later than the 13th month prior to Employee's Retirement Date.

5.4. Death While Employed by the Corporation. In the event Employee dies while employed by the Corporation, any benefits payable under this Appendix A shall be determined in accordance with Section 6.

6. DEATH WHILE EMPLOYED BY THE CORPORATION.

6.1. General. In the event Employee dies while employed by the Corporation the death benefit payable under this Appendix A shall be as follows:

(a) if Employee is married on his date of death, 50% of the lump sum that is Actuarially Equivalent to the Normal Retirement Benefit determined under Section 5.1(a) of this Appendix A, such lump sum benefit to be determined as if Employee Retired on his date of death after reaching Normal Retirement Age; or

(b) if Employee is not married on his date of death, 50% of the lump sum that is Actuarially Equivalent to the Normal Retirement Benefit determined under Section 5.1(b) of this Appendix A, such lump sum benefit to be determined as if Employee Retired on his date of death after reaching Normal Retirement Age.

The death benefit shall be payable in a lump sum as soon as administratively practicable following Employee's date of death.

6.2. Payee. This death benefit shall be payable to Employee's (a) surviving spouse if Employee is married on his date of death, or (b) Beneficiary if Employee is not married on his date of death. "Surviving spouse" for purposes of this Section 6.2 means the spouse to whom Employee is married on his date of death.

7. EFFECT OF A CHANGE IN CONTROL OF THE CORPORATION. Anything in this Appendix A to the contrary notwithstanding, this Section 7 shall apply in the event of a Change in Control. If, within three years after the date of a Change in Control Employee's employment with the Corporation is involuntarily terminated by the Corporation for any reason (other than Cause), or Employee voluntarily terminates employment with the Corporation for Good Reason, and employee is not otherwise eligible for Retirement, then Employee shall be deemed to have Retired with a fully vested Normal Retirement Benefit on the date of such termination of employment. Employee's Normal Retirement Benefit shall be determined as of such deemed Retirement Date, and shall be payable in a lump sum, calculated pursuant to Sections 5.1 and 5.3, as soon as administratively practicable following such deemed Retirement Date.

Solely for purposes of this Section 7, "Good Reason" shall mean termination of Employee's employment by Employee within 90 days following (i) a material diminution in Employee's positions, duties and responsibilities from those described in this Employment Agreement (ii) a reduction in Employee's Base Salary (other than a reduction which is part of a general salary reduction program affecting senior executives of the Corporation) (iii) a material reduction in the aggregate value of the pension and welfare benefits provided to Employee from those in effect prior to the Change in Control (other than a reduction which is proportionate to the reductions applicable to other senior executives pursuant to a cost-saving plan that includes all senior

executives), (iv) a material breach of any provision of this Employment Agreement by the Corporation, (v) the Corporation's requiring Employee to be based at a location that creates for Employee a one way commute in excess of 60 miles from his primary residence, except for required travel on the Corporation's business to an extent substantially consistent with the business travel obligations of Employee under this Employment Agreement. Notwithstanding the foregoing, a termination shall not be treated as a termination for Good Reason (i) if Employee shall have consented in writing to the occurrence of the event giving rise to the claim of termination for Good Reason or (ii) unless Employee shall have delivered a written notice to the Corporation within 30 days of his having actual knowledge of the occurrence of one of such events stating that he intends to terminate his employment for Good Reason and specifying the factual basis for such termination, and such event, if capable of being cured, shall not have been cured within 30 days of the receipt of such notice.

8. EFFECT OF TERMINATION OF EMPLOYMENT AND REHIRE. Upon Employee's termination of employment with the Corporation the benefit payable under this Appendix A, if any, shall be determined by the Corporation and such determination shall be conclusive and binding (subject to Section 14). If Employee is subsequently reemployed by the Corporation such reemployment, additional service, and additional compensation shall not result in a re-determination of the benefits due under this Appendix A. If, upon reemployment, Employee is receiving installment payments pursuant to Section 5 those payments shall not be suspended during any period of reemployment.

9. ADMINISTRATION.

9.1. Powers of the Corporation: The Board of Directors of the Corporation (the "Board") shall have the sole authority to act on behalf of the Corporation under this Appendix A (subject to Section 9.3), and shall have all the powers necessary to administer the benefits under this Appendix A, including, without limitation, the power to interpret the provisions of this Appendix A and to establish rules and prescribe any forms required to administer benefits under this Appendix A

9.2. Actions of the Board: All determinations, interpretations, rules, and decisions of the Board shall be conclusive and binding upon all persons having or claiming to have any interest or right under this Appendix A.

9.3. Delegation: The Board shall have the power to delegate specific duties and responsibilities to officers or other employees of the Corporation or other individuals or entities. Any delegation by the Board may allow further delegations by the individual or entity to whom the delegation is made. Any delegation may be rescinded by the Board at any time. Each person or entity to whom a duty or responsibility has been delegated shall be responsible for the exercise of such duty or responsibility and shall not be responsible for any act or failure to act of any other person or entity.

9.4. Reports and Records: The Board and those to whom the Board has delegated duties under Section 9.3 shall keep records of all their proceedings and actions and shall maintain books of

account, records, and other data as shall be necessary for the proper administration of this Appendix A and for compliance with applicable law.

9.5. Costs: The costs of providing and administering the benefits under this Appendix A shall be borne by the Corporation.

10. UNFUNDED BENEFITS; ESTABLISHMENT OF TRUST.

10.1. Unfunded Status. This Appendix A shall be unfunded for tax purposes and for purposes of Title 1 of ERISA.

10.2. Establishment of Trust. The Corporation shall not be required to set aside any funds to discharge its obligations hereunder, but may set aside such funds to informally fund all or part of its obligations hereunder if it chooses to do so, including without limitation the contribution of assets to a "rabbi trust" (the Trust). Any setting aside of amounts, or acquisition of any insurance policy or any other asset, by the Corporation with which to discharge its obligations hereunder in trust or otherwise, shall not be deemed to create any beneficial ownership interest in Employee, his surviving spouse, or Beneficiary, and legal and equitable title to any funds so set aside shall remain in the Corporation, and any recipient of benefits hereunder shall have no security or other interest in such funds. The rights of Employee and his surviving spouse and Beneficiary(ies) under this Appendix A shall be no greater than the rights of a general unsecured creditor of the Corporation. Any and all funds so set aside by the Corporation shall remain the general assets of the Corporation, and subject to the claims of its general creditors, present and future.

10.3. Interrelationship of this Appendix A and the Trust. The provisions of this Appendix A shall govern the rights of Employee to receive distributions pursuant to the provisions of this Appendix A. The provisions of the Trust shall govern the rights of the Corporation, Employee, and creditors of the Corporation to the assets transferred to the Trust. The Corporation shall at all times remain liable to carry out its obligations under this Appendix A.

10.4. Distributions from the Trust. The Corporation's obligations under this Appendix A may be satisfied with Trust assets distributed pursuant to the terms of the Trust, and any such distribution shall reduce the Corporation's obligation under this Appendix A.

11. PAYMENT OF BENEFIT FOR DISABLED OR INCAPACITATED PERSON. If the Corporation determines, in its discretion, that Employee or Employee's Beneficiary or surviving spouse is under a legal disability or is incapacitated in any way so as to be unable to manage his financial affairs, the Corporation shall make payment to such person or to his legal representative or to a friend or relative of such person as the Corporation considers advisable. Any payment under this Section 11 shall be a complete discharge of any liability for the making of such payment under this Appendix A. Nothing contained in this Section 11 however, should be deemed to impose upon the Corporation any liability for paying a benefit to any person who is under such a legal disability or is so incapacitated unless it has received notice of such disability or incapacity from a competent source.

12. NONASSIGNABILITY. Neither Employee nor any other person shall have any right to commute,

sell, assign, transfer, pledge, anticipate, mortgage or otherwise encumber, transfer, hypothecate, alienate or convey in advance of actual receipt, the amounts, if any, payable hereunder, or any part thereof, which are, and all rights to which are expressly declared to be, unassignable and non-transferable. No part of the amounts payable shall, prior to actual payment, be subject to seizure, attachment, garnishment or sequestration for the payment of any debts, judgments, alimony or separate maintenance owed by Employee or any other person, be transferable by operation of law in the event of Employee's or any other person's bankruptcy or insolvency or be transferable to a spouse as a result of a property settlement or otherwise. The Corporation is authorized to make any payments directed by court order.

13. CLAIM PROCEDURE.

13.1. Presentation of Claim. Employee, or the surviving spouse of Employee after Employee's death, or Employee's Beneficiary (such Employee, surviving spouse, or Beneficiary being referred to below as a "Claimant") may deliver to the Corporation a written claim for a determination with respect to the amounts distributable to such Claimant under this Appendix A. If such a claim relates to the contents of a notice received by the Claimant, the claim must be made within sixty (60) days after such notice was received by the Claimant. All other claims must be made within 180 days of the date on which the event that caused the claim to arise occurred. The claim must state with particularity the determination desired by the Claimant.

13.2. Notification of Decision. The Corporation shall consider a Claimant's claim within a reasonable time, but no later than ninety (90) days after receiving the claim. If the Corporation determines that special circumstances require an extension of time for processing the claim, written notice of the extension shall be furnished to the Claimant prior to the termination of the initial ninety (90) day period. In no event shall such extension exceed a period of ninety (90) days from the end of the initial period. The extension notice shall indicate the special circumstances requiring an extension of time and the date by which the Corporation expects to render the benefit determination. The Corporation shall notify the Claimant in writing:

(a) that the Claimant's requested determination has been made, and that the claim has been allowed in full; or

(b) that the Corporation has reached a conclusion contrary, in whole or in part, to the Claimant's requested determination, and such notice must set forth in a manner calculated to be understood by the Claimant:

(i) the specific reason(s) for the denial of the claim, or any part of it;

(ii) specific reference(s) to pertinent provisions of this Appendix A upon which such denial was based;

(iii) a description of any additional material or information necessary for the Claimant to perfect the claim, and an explanation of why such material or information is necessary;

(iv) an explanation of the claim review procedure set forth in Section 13.3 below; and

(v) a statement of the Claimant's right to bring a civil action under ERISA Section 502(a) following an adverse benefit determination on review.

13.3. Review of a Denied Claim. On or before sixty (60) days after receiving a notice from the Corporation that a claim has been denied, in whole or in part, a Claimant (or the Claimant's duly authorized representative) may file with the Corporation a written request for a review of the denial of the claim. The Claimant (or the Claimant's duly authorized representative):

(a) may, upon request and free of charge, have reasonable access to, and copies of, all documents, records and other information relevant to the claim for benefits;

(b) may submit written comments or other documents; and/or

(c) may request a hearing, which the Corporation, in its sole discretion, may grant.

13.4. Decision on Review. The Corporation shall render its decision on review promptly, and no later than sixty (60) days after the Corporation receives the Claimant's written request for a review of the denial of the claim. If the Corporation determines that special circumstances require an extension of time for processing the claim, written notice of the extension shall be furnished to the Claimant prior to the termination of the initial sixty (60) day period. In no event shall such extension exceed a period of sixty (60) days from the end of the initial period. The extension notice shall indicate the special circumstances requiring an extension of time and the date by which the Corporation expects to render the benefit determination. In rendering its decision, the Corporation shall take into account all comments, documents, records and other information submitted by the Claimant relating to the claim, without regard to whether such information was submitted or considered in the initial benefit determination. The decision must be written in a manner calculated to be understood by the Claimant, and it must contain:

(a) specific reasons for the decision;

(b) specific reference(s) to the pertinent provisions of this Appendix A upon which the decision was based;

(c) a statement that the Claimant is entitled to receive, upon request and free of charge, reasonable access to and copies of, all documents, records and other information relevant (as defined in applicable ERISA regulations) to the Claimant's claim for benefits; and

(d) a statement of the Claimant's right to bring a civil action under ERISA Section 502(a).

13.5. LEGAL ACTION. A Claimant's compliance with the foregoing provisions of this Article 13 is a mandatory prerequisite to a Claimant's right to commence any legal action with respect to any claim for benefits under this Appendix A.

14. TAX WITHHOLDING AND REPORTING; SECTION 280G EXCISE TAXES.

(a) General. The Corporation shall have the right to deduct any required withholding taxes from any payment made under this Appendix A. Except as provided in Section 14(b), the Corporation shall not be obligated to pay or reimburse Employee, or his surviving spouse or Beneficiary, for any income or other taxes or penalties that may be imposed on such person by the Internal Revenue Service or any state or other taxing authority as a result of benefits paid under this Appendix A.

(b) Excise Tax Payment. In the event that any payment or benefit (within the meaning of Section 280G(b)(2) of the Internal Revenue Code of 1986, as amended (the "Code")), to Employee or for his benefit paid or payable or distributed or distributable pursuant to the terms of this Employment Agreement (including this Appendix A) or otherwise in connection with, or arising out of, his employment with the Corporation or a Change in Control of the Corporation (a "Payment" or "Payments"), would be subject to the excise tax imposed by Section 4999 of the Code or any interest or penalties are incurred by the Employee with respect to such excise tax (such excise tax, together with any such interest and penalties, are hereinafter collectively referred to as the "Excise Tax"), then Employee will be entitled to immediately receive an additional payment (a "Gross-Up Payment") in an amount such that after payment by Employee of all taxes (including any interest or penalties, other than interest and penalties imposed by reason of Employee's failure to file timely a tax return or pay taxes shown due on his return, imposed with respect to such taxes and the Excise Tax), including any Excise Tax imposed upon the Gross-Up Payment, Employee retains an amount of the Gross-Up Payment equal to the Excise Tax imposed upon the Payments.

15. SUCCESSORS. The provisions of this Appendix A shall bind and inure to the benefit of the Corporation and its successors and assigns and Employee and Employee's surviving spouse and designated beneficiaries.

16. AMENDMENT. This Appendix A may be amended only by written agreement between Employee and the Corporation.

17. LEGEND

The securities represented by this supplemental retirement benefit have not been registered under the Securities Act of 1933, as amended, and may not be sold, transferred or otherwise disposed of in the absence of an effective registration statement under such Act or an opinion of counsel satisfactory to the corporation to the effect that such registration is not required.

EMPLOYMENT AGREEMENT

EMPLOYMENT AGREEMENT dated as of July 1, 2005 ("Employment Agreement"), by and between MKS Instruments, Inc., a Massachusetts Corporation (the "Corporation"), and William Stewart, of Boulder, CO (the "Employee").

WHEREAS, the Corporation and the Employee entered into an Employment Agreement dated December 15, 1995 (the "Original Employment Agreement"); and

WHEREAS, the Corporation intends to provide certain retiree medical benefits to the Employee as more particularly set forth herein; and

WHEREAS, the Corporation and the Employee intend that this Employment Agreement shall supercede the Original Employment Agreement and that as of the date hereof, the Original Employment Agreement shall be of no further force and effect;

NOW, THEREFORE, in consideration of the premises and the mutual promises contained herein, the Corporation and the Employee hereby agree as follows:

(1) Term of Employment: The Corporation hereby employs the Employee, and the Employee hereby accepts employment with the Corporation, for a period commencing as of July 1, 2005 and continuing from month to month thereafter until terminated as provided in this Section (1). Either the Corporation or the Employee may terminate the employment of the Employee under this Employment Agreement at any time after July 1, 2005 by giving written notice to the other party stating its or his election to terminate the employment of the Employee under this Employment Agreement. The employment of the Employee under this Employment Agreement shall terminate thirty (30) days after the date of receipt by the other party of such notice; provided, however, that the employment of the Employee under this Employment Agreement is subject to prior termination as hereinafter provided in Section (5). Notwithstanding the above, the Corporation shall be entitled, at its sole discretion, to waive the obligation of the Employee to continue to work during the thirty (30) day notice period.

(2) Capacity: The Employee shall serve as Vice President and General Manager - Vacuum Products Group of the Corporation and shall have such authority and will perform such duties as are delegated to him by the CEO & President of the Corporation or his designee that are consistent with this position and his training and experience for the term of employment under this Employment Agreement.

(3) Extent of Services: During the term of employment of the Employee under this Employment Agreement, the Employee shall devote his full time to, and use his best efforts in the furtherance of, the business of the Corporation and shall not engage in any other business activity, whether or not such business activity is pursued for gain or any other pecuniary advantage, without the prior written consent of the Corporation.

(4) Compensation: In consideration of the services to be rendered by the Employee under this Employment Agreement, the Corporation agrees to pay, and the Employee agrees to accept, the following compensation:

(a) Base Salary: A base salary at the rate of two hundred thirty-five thousand one hundred and thirty-nine dollars (\$235,139) per year for the term of employment of the Employee under this Employment Agreement. The base salary shall be payable in equal biweekly installments, subject to usual withholding requirements, and will be subject to any changes in pay policies that may be established by the Corporation. The base salary will be reviewed regularly according to the practices of the Corporation. No overtime pay will be paid to the Employee by the Corporation.

(b) Incentive: For each calendar year of the corporation during the term of employment of the Employee under this Employment Agreement, the Employee shall be entitled to participate in a Management Incentive Program pursuant to the terms of which the Employee may receive compensation in addition to his base salary if the Corporation attains its consolidated financial goals during such calendar year of the Corporation. The "targeted" additional compensation goal for the Employee shall be 40% of his base annual earnings. The Management Incentive Program, including the consolidated financial goals established by the Corporation for the calendar year and the formula to be used to determine the payment of amounts under the Management Incentive Program, will be communicated to the Employee in writing prior to the beginning of each calendar year of the Corporation. If there shall be any disagreement between the Corporation and the Employee as to the calculation of the Management

Incentive Bonus in any calendar year of the Corporation during the term of employment of the Employee under this Employment Agreement, the decision of the independent Public Accounting firm of the corporation as to the amount of the Management Incentive Bonus of the Corporation shall be conclusive and binding on the Corporation and the Employee. The Employee shall have no right to inspect any of the books, papers or records of the Corporation, except that the Employee shall be entitled to inspect any certificate of such independent public accounting firm as to the calculation of the Management Incentive Bonus of the Corporation in any calendar year of the Corporation during the term of employment of the Employee under this Employment Agreement. Incentive payments shall be payable to the Employee on or before March 31 after the end of each calendar year of the Corporation during the term of employment of the Employee under this Employment Agreement. The Employee will not receive any payment under the Management Incentive Program for any calendar year in which the Employee is not actively employed on the last day of that calendar year.

(c) MKS Instruments Profit Sharing and Retirement Savings Plan: The Employee shall be eligible to become a participant under the profit sharing plan of the Corporation on fulfilling the conditions set forth in the MKS Instruments Profit Sharing and Retirement Savings Plan.

(d) Vacation: The Employee shall be entitled to an annual vacation leave of twenty-five (25) days at full pay during each year of this Employment Agreement, subject to the Employee arranging such vacation so as not to affect adversely the ability of the Corporation to transact its necessary business.

(e) Life Insurance: The Corporation shall provide, and pay all of the premiums for, term life insurance for the Employee during the term of employment of the Employee under this Employment Agreement in accordance with the term life insurance plan of the Corporation.

(f) Medical/Dental Insurance: The Corporation shall provide group medical/dental insurance for the Employee under the plans of the Corporation applicable to the Employee during the term of employment of the Employee under this Employment Agreement.

(g) Other Benefits: The Corporation shall provide other benefits for the Employee under the plans of the Corporation applicable to the Employee during the term of employment of the Employee under this Employment Agreement.

(5) Termination: The employment of the Employee under this Employment Agreement shall terminate:

(a) On the expiration of the period of employment as provided in Section (1).

(b) Upon the death of the Employee.

(c) At the election of the Corporation (i) if the Employee shall refuse to perform the services required of him under this Employment Agreement, or (ii) if the Employee shall fail, or refuse, to perform the other covenants and agreements required of him under this Employment Agreement, or (iii) for "cause", which term shall mean conviction for the commission of a felony, willful failure by the Employee to perform his responsibilities to the Corporation, or willful misconduct by the Employee.

(6) Payment Upon Termination:

(a) If the employment of the Employee is terminated by the Corporation other than pursuant to Section 5 (c) hereof, the Corporation (i) shall continue to pay Employee the Base Salary in effect immediately prior to the time of such termination for six (6) months after the last full day Employee works under this Agreement at its normal payroll payment dates; (ii) shall reimburse Employee for the premiums (if any) he pays for continuation of life insurance should he elect to exercise the conversion feature of the Corporation's group life policy then in effect for six (6) months after the last full day Employee works under this Agreement; and (iii) continue to pay for such dental/vision insurance as Employee may then receive for six (6) months after the last full day Employee works under this Agreement and (iv) to the extent the Employee is eligible pursuant to Section 6(e) hereof, shall provide Retiree Medical Benefits (such payments of Base Salary and payments or reimbursements of insurance premiums and Retiree Medical Benefits by the Corporation, the "Severance Benefits). Employee agrees that, (a) his eligibility for or entitlement to the foregoing Severance Benefits shall be subject to Employee's execution and delivery of a release, in such form as the Corporation may require, that, among other things, may be a general release of any and all claims

Employee may have against Employer, (b) Employee shall have no rights or remedies in the event of his or her termination by the Corporation without Cause and other than as a result of Disability or death except for those set forth in this Agreement and (c) Employee's right to receive any of the foregoing Severance Benefits shall be expressly conditioned upon Employee's full compliance with the Confidentiality Agreement, pursuant to its continued effectiveness, and Employee's full cooperation with the Corporation in both fulfilling the terms of this Agreement and the Confidentiality Agreement and otherwise performing such actions as the Corporation may request in transitioning Employee from his employment with the Corporation and upon any breach of either such agreement by Employee, Employee's rights to any continued payment of Severance Benefits shall immediately cease and Employee shall be obligated to repay to the Corporation all amounts paid by the Corporation for the Severance Benefits except for the amount of \$1,000, which Employee shall be entitled to retain.

(b) If the employment of the Employee is terminated by death, the Corporation shall pay to the estate of the Employee the compensation which would otherwise be payable to the Employee at the end of the month in which his death occurs.

(c) In the event the employment of the Employee is terminated at the election of the Corporation pursuant to Section (5) (c) hereof, the Employee shall only be entitled to his base salary through the last day of actual employment or the date of termination, whichever is earlier.

(d) In the event the Employee voluntarily terminates his employment on the expiration of the period of employment as provided in Section (1), the Employee shall not be entitled to any compensation, and the Corporation shall have no obligation to pay the Employee any compensation, except as is provided in this Employment Agreement.

(e) Retiree Medical Benefits.

(i) Eligibility. The Employee's eligibility to receive the retiree medical benefits set forth hereunder (the "Retiree Medical Benefits") is contingent upon (a) the Employee's compliance with all of the material terms and conditions contained in this Employment Agreement, (b) the Employee's execution, upon termination of employment (except in the case of death), of a separation agreement that releases the

Corporation from any liabilities that may have arisen from employment or termination of employment with the Corporation, and (c) the occurrence of any of the following:

(A) the Employee retires from the Corporation when Employee is at least 62 years old, provided that, if Employee is under 65 at the time of such retirement, the terms of the benefits shall be subject to subsection 6(e)(iii) hereof; or

(B) the Employee is terminated by the Corporation other than for "cause" or if Employee terminates his employment for Good Reason (as defined below within 3 years of a change in control as defined below); provided that if the Employee is eligible at any time to receive comparable medical benefits from any subsequent employer, then the Employee shall not be eligible to receive the Retiree Medical Benefits during the time that he is eligible to receive such benefits from a subsequent employer, but will be eligible to receive the Retiree Medical Benefits thereafter; or

(C) prior to retirement, the Disability (which shall mean disability as defined in Section 216(i)(1) of the Social Security Act) or death of the Employee.

If the Employee meets the eligibility criteria described above, he shall be considered an "Eligible Employee" hereunder. The Spouse of the Eligible Employee ("Eligible Spouse") shall also receive Medical Retirement Benefits. The Employee shall not be eligible for Medical Retirement Benefits if Employee is terminated by the Corporation for "cause".

For purposes of this section, "Good Reason" shall mean termination of Employee's employment by Employee within 90 days following (I) a material diminution in Employee's positions, duties and responsibilities from those described in this Employment Agreement (II) a reduction in Employee's Base Salary (other than a reduction which is part of a general salary reduction program affecting senior executives of the Corporation) (III) a material reduction in the aggregate value of the pension and welfare benefits provided to Employee from those in effect prior to the Change in Control (other than a reduction which is proportionate to the reductions applicable to other senior executives pursuant to a cost-saving plan that includes all senior executives), (IV) a material breach of any provision of this Employment Agreement by

the Corporation, (V) the Corporation's requiring Employee to be based at a location that creates for Employee a one way commute in excess of 60 miles from his primary residence, except for required travel on the Corporation's business to an extent substantially consistent with the business travel obligations of Employee under this Employment Agreement. Notwithstanding the foregoing, a termination shall not be treated as a termination for Good Reason (I) if Employee shall have consented in writing to the occurrence of the event giving rise to the claim of termination for Good Reason or (II) unless Employee shall have delivered a written notice to the Corporation within 30 days of his having actual knowledge of the occurrence of one of such events stating that he intends to terminate his employment for Good Reason and specifying the factual basis for such termination, and such event, if capable of being cured, shall not have been cured within 30 days of the receipt of such notice.

For purposes of this section "Change in Control" means the first to occur of any of the following events: (I) Any "person" (as that term is used in Section 13 and 14(d)(2) of the Securities Exchange Act of 1934 ("Exchange Act")) becomes the beneficial owner (as that term is used in Section 13(d) of the Exchange Act), directly or indirectly, of fifty percent (50%) or more of the Corporation's capital stock entitled to vote in the election of directors; (II) The shareholders of the Corporation approve any consolidation or merger of the Corporation, other than a consolidation or merger of the Corporation in which the holders of the common stock of the Corporation immediately prior to the consolidation or merger hold more than fifty percent (50%) of the common stock of the surviving corporation immediately after the consolidation or merger; (III) The shareholders of the Corporation approve any plan or proposal for the liquidation or dissolution of the Corporation; or (IV) The shareholders of the Corporation approve the sale or transfer of all or substantially all of the assets of the Corporation to parties that are not within a "controlled group of corporations" (as defined in Code Section 1563) in which the Corporation is a member.

(ii) Benefit Period and Types of Coverage. Eligible Employees and Eligible Spouses will each receive Retiree Medical Benefits for their respective lifetimes. During the 18 months immediately following termination of employment from the Corporation, Retiree Medical Benefits will be provided to the Eligible Employee and Eligible Spouse through the Corporation's COBRA medical plan. Thereafter, the Corporation shall purchase fully insured non-group medical plans for the Eligible Employee and Eligible Spouse. The insurance plans purchased for the Eligible

Employee and/or Eligible Spouse who are less than 65 years old shall be a high benefit plan comparable to the Corporation's group medical plan selected by the Employee immediately prior to termination of employment. The insurance plans purchased for the Eligible Employee and/or Eligible Spouse who are 65 or more years old shall be Blue Cross/ Blue Shield's Medex Gold or other comparable high benefit medical plan.

(iii) Cost. The Eligible Employee (or surviving Eligible Spouse) will be required to contribute a fixed annual amount of \$1,500 for each year that he (or surviving Eligible Spouse) remains eligible for Retiree Medical Benefits. In addition to such \$1,500, if the Employee became an Eligible Employee pursuant to Section (a)(i) above, then in addition to the \$1,500, the Employee (or surviving Eligible Spouse) shall be required to pay a portion of the expenses of the Retiree Medical Benefit as follows:

Age	Percentage of Retiree Medical Benefit Costs to be Paid by Employee (or surviving spouse) at Such Age
- - - -	-----
62	30%
63	20%
64	10%
65 or more	0%

(7) Trade Secrets: The Employee covenants and agrees that he will communicate to the Corporation, and will not divulge or communicate to any other person, partnership, corporation or other entity without the prior written consent of the Corporation, any trade secrets of the Corporation or confidential information relating to the business of the Corporation or any one connected with the Corporation, and that such trade secrets and confidential information shall not be used by the Employee either on his own behalf or for the benefit of others or disclosed by the Employee to any one, except to the Corporation, during or after the term of employment of the Employee under this Employment Agreement.

(8) Inventions and Patents:

(a) The Employee shall make prompt full disclosure in writing to the Corporation of all inventions, improvements and discoveries, whether or not patentable, which the Employee conceives, devises, makes, discovers, develops, perfects or first reduces to practice, either alone or jointly with others, during the term of employment of the Employee under this Employment Agreement, which relate in any way to the fields,

products or business of the Corporation, including development and research, whether during or out of the usual hours of work or on or off the premises of the Corporation or by use of the facilities of the Corporation or otherwise and whether at the request or suggestion of the Corporation or otherwise (all such inventions, improvements and discoveries being hereinafter called the "Inventions"), including any Inventions, whether or not patentable, conceived, devised, made, discovered, developed, perfected or first reduced to practice by the Employee after the employment of the Employee under this Employment Agreement is terminated if the Inventions were conceived by the Employee during the term of employment of the Employee under this Employment Agreement. Any Inventions, whether or not patentable, conceived, devised, made, discovered, developed, perfected or first reduced to practice by the Employee within six (6) months of the date of termination of the employment of the Employee under this Employment Agreement shall be conclusively presumed to have been conceived during the term of employment of the Employee under this Employment Agreement.

(b) The Employee agrees that the Inventions shall be the sole and exclusive property of the Corporation.

(c) The Employee agrees to assist the Corporation and its nominees in every reasonable way (entirely at its or their expense) to obtain for the benefit of the Corporation letters patent for the Inventions and trademarks, trade names and copyrights relating to the Inventions, and any renewals, extensions or reissues thereof, in any and all countries, and agrees to make, execute, acknowledge and deliver, at the request of the Corporation, all written applications for letters patent, trademarks, trade names and copyrights relating to the Inventions and any renewals, extensions or reissues thereof, in any and all countries, and all documents with respect thereto, and all powers of attorney relating thereto and, without further compensation, to assign to the Corporation or its nominee all the right, title and interest of the Employee in and to such applications and to any patents, trademarks, trade names or copyrights which shall thereafter issue on any such applications, and to execute, acknowledge and deliver all other documents deemed necessary by the Corporation to transfer to or vest in the Corporation all of the right, title and interest of the Employee in and to the Inventions, and to such trademarks, trade names, patents and copyrights together with exclusive rights to make, use, license and sell them throughout the world.

(d) The Employee agrees that even though his employment is terminated

under this Employment Agreement he will, at any time after such termination of employment, carry out and perform all of the agreements of Subsections (8) (a) and (8) (c) above, and will at any time and at all times cooperate with the Corporation in the prosecution and/or defense of any litigation which may arise in connection with the Inventions, provided, however, that should such services be rendered after termination of employment of the Employee under this Employment Agreement, the Employee shall be paid reasonable compensation on a per diem basis.

(e) The Employee agrees to make and maintain adequate and current written records of all Inventions in the form of notes, sketches, drawings, or reports relating thereto, which records shall be and remain the property of, and available to, the Corporation at all times.

(f) The Employee agrees that he will, upon leaving the employment of the Corporation, promptly deliver to the Corporation all originals and copies of disclosures, drawings, prints, letters, notes, and reports either typed, handwritten or otherwise memorialized, belonging to the Corporation which are in his possession or under his control and the Employee agrees that he will not retain or give away or make copies of the originals or copies of any such disclosures, drawings, prints, letters, notes or reports.

(9) Property of Corporation: All files, records, reports, documents, drawings, specifications, equipment, and similar items relating to the business of the Corporation, whether prepared by the Employee or otherwise coming into his possession, shall remain the exclusive property of the Corporation and shall not be removed by the Employee from the premises of the Corporation under any circumstances whatsoever without the prior written consent of the Corporation.

(10) Non-Competition:

(a) During the term of employment of the Employee under this Employment Agreement, and during a period of one (1) year after termination of employment of the Employee under this Employment Agreement if such termination of employment was caused by the Corporation (or by the Employee for Good Reason), or for a period of two (2) years after termination of employment of the Employee under this Employment Agreement if such termination of employment was caused by the

Employee (other than for Good Reason), (i) the Employee shall not engage, either directly or indirectly, in any manner or capacity, in any business or activity which is competitive with any business or activity conducted by the Corporation; (ii) the Employee shall not work for or employ, directly or indirectly, or cause to be employed by another, any person who was an employee, officer or agent of the Corporation or of any of its subsidiaries at any time during a period of twelve (12) months prior to the termination of the employment of the Employee under this Employment Agreement nor shall the Employee form any partnership with, or establish any business venture in cooperation with, any such person which is competitive with any business or activity of the Corporation; and (iii) the Employee shall not have any material financial interest, or participate as a director, officer, 1% stockholder, partner, employee, consultant or otherwise, in any corporation, partnership or other entity which is competitive with any business or activity conducted by the Corporation.

(b) The Corporation and the Employee agree that the services of the Employee are of a personal, special, unique and extraordinary character, and cannot be replaced by the Corporation without great difficulty, and that the violation by the Employee of any of his agreements under this Section (10) would damage the goodwill of the Corporation and cause the Corporation irreparable harm which could not reasonably or adequately be compensated in damages in an action at law, and that the agreements of the Employee under this Section (10) may be enforced by the Corporation in equity by an injunction or restraining order in addition to being enforced by the Corporation at law.

(c) In the event that this Section (10) shall be determined by any court of competent jurisdiction to be unenforceable by reason of its extending for too long a period of time or over too great a range of activities, it shall be interpreted to extend only over the maximum period of time or range of activities as to which it may be enforceable.

(11) Non-Solicitation: The Employee shall not, on his own behalf or in the service or on behalf of others, directly or indirectly:

(a) solicit, entice or induce any Customer (as defined below) to become a customer, distributor or supplier of any other person, firm or corporation with respect to products and/or services sold or under development by the Corporation during his

employment at the Corporation, or to cease doing business with the Corporation, and the Employee shall not contact or approach any such person, firm or corporation for such purpose or authorize or knowingly approve the taking of such actions by any other person for a period of two (2) years from the date of the termination of employment of the Employee under this Employment Agreement; or

(b) solicit, recruit or hire (or attempt to solicit, recruit or hire) any employee, officer or agent of the Corporation or contractor engaged by the Corporation (whether or not such person is a full-time employee or whether or not such employment is pursuant to a written agreement or at-will) to terminate such person's employment or engagement with the Corporation or work for a third party other than the Corporation for a period of two (2) years after the date of the termination of employment of the Employee under this Employment Agreement, or engage in any activity that would cause such employee or contractor to violate any agreement with the Corporation, nor shall the Employee form any partnership with, or establish any business venture in cooperation with, any such person.

(c) For the purposes of this Section (11), a "Customer" means any person or entity which as of the date of the termination of employment of the Employee under this Employment Agreement was, within two (2) years prior to such time, a customer, distributor or supplier of the Corporation, and references to the Corporation shall be deemed to include any affiliate or subsidiary of the Corporation.

(12) Notice: Any and all notices under this Employment Agreement shall be in writing and, if to the Corporation, shall be duly given if sent to the Corporation by registered or certified mail, postage prepaid, return receipt requested, at the address of the Corporation set forth under its name below or at such other address as the Corporation may hereafter designate to the Employee in writing for the purpose, and, if to the Employee, shall be duly given if delivered to the Employee by hand or if sent to the Employee by registered or certified mail, postage prepaid, return receipt requested, at the address of the Employee set forth under his name below or at such other address as the Employee may hereafter designate to the Corporation in writing for the purpose.

(13) Assignment: The rights and obligations of the Corporation under this Employment Agreement shall inure to the benefit of, and shall be binding upon, the successors and assigns of the Corporation. The rights and obligations of the Employee

under this Employment Agreement shall inure to the benefit of, and shall be binding upon, the heirs, executors and legal representatives of the Employee.

(14) Entire Agreement and Severability:

(a) This Employment Agreement supersedes any and all other agreements, either oral or in writing, between the parties hereto with respect to the employment of the Employee by the Corporation and contains all of the covenants and agreements between the parties with respect to such employment. Each party to this Employment Agreement acknowledges that no representations, inducements, promises or agreements, oral or otherwise, have been made by any party, or any one acting on behalf of any party, which are not embodied herein, and that no other agreement, statement or promise not contained in this Employment Agreement shall be valid and binding. Any modification of this Employment Agreement will be effective only if it is in writing signed by both parties to this Employment Agreement.

(b) If any provision in this Employment Agreement is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remaining provisions shall nevertheless continue in full force and effect without being impaired or invalidated in any way.

(c) All pronouns used herein shall include the masculine, feminine, and neuter gender as the context requires.

(15) Governing Law: This Employment Agreement shall be governed by, and construed in accordance with, the laws of The Commonwealth of Massachusetts applicable to contracts made and to be performed entirely within The Commonwealth of Massachusetts without regard to its conflict of laws principles.

(16) Arbitration. Any controversy or claim arising out of, or relating to, this Employment Agreement, or the breach hereof shall be settled by binding arbitration in accordance with the American Arbitration Association National Rules for Resolution of Employment Disputes then in effect in the Commonwealth of Massachusetts, and judgment upon any arbitration award may be entered into in any court having jurisdiction thereof. The arbitration shall be held in Wilmington, Massachusetts. The Company shall bear the cost of any such arbitration.

IN WITNESS WHEREOF, the parties hereto have executed, in The Commonwealth of Massachusetts, this Employment Agreement as a sealed instrument, all as of the day, month and year first written above.

MKS INSTRUMENTS, INC.

By: /s/ Leo Berlinghieri

CEO & President

90 Industrial Way
Wilmington, MA 01887

/s/ William Stewart

Legal Signature

William Stewart
Address:

P.O. Box 20070
Boulder, CO 80308

AMENDMENT TO 2005 MANAGEMENT INCENTIVE BONUS PROGRAM
OF MKS INSTRUMENTS, INC.

Effective as of July 1, 2005, Mr. Bertucci's target bonus under the 2005 MKS Management Incentive Bonus was reduced from 75% of base earnings to 60% of base earnings.

SUMMARY OF COMPENSATORY ARRANGEMENTS WITH EXECUTIVE OFFICERS

John R. Bertucci Executive Chairman	\$450,000
Leo Berlinghieri President and Chief Executive Officer	\$425,000
Gerald G. Colella Chief Business Officer and Vice President	\$290,000
Ron Hadar Vice President and General Manager, CIT Products	\$205,000
Robert L. Klimm Vice President and General Manager, Power and Reactive Gas Products Group	\$222,936
John A. Smith Vice President and Chief Technology Officer	\$260,747
William D. Stewart Vice President and General Manager, Vacuum Products Group	\$235,139
Ronald C. Weigner Vice President and Chief Financial Officer	\$240,011

FOR IMMEDIATE RELEASE

CONTACT:
Ronald Weigner
Vice President & Chief Financial Officer
978.284.4446

MKS INSTRUMENTS BOARD ELECTS

LEO BERLINGHIERI CHIEF EXECUTIVE OFFICER

JOHN BERTUCCI ELECTED EXECUTIVE CHAIRMAN

Wilmington, Mass., June 30, 2005 -- MKS Instruments, Inc. (NASDAQ: MKSI), a leading worldwide provider of process control technologies for improving productivity in semiconductor and other advanced manufacturing processes, announced today that the Board of Directors, acting on a recommendation from Chairman and Chief Executive Officer John R. Bertucci, elected Leo Berlinghieri CEO in addition to his role as President and elected Mr. Berlinghieri to the MKS Board of Directors, effective July 1, 2005. Mr. Bertucci is resigning his duties as CEO at the end of the calendar quarter on June 30, 2005. The Board elected Mr. Bertucci to the position of Executive Chairman of the Board of Directors, effective July 1, 2005.

Mr. Bertucci, 64, said, "Leo was elected Chief Operating Officer two years ago and President last year, and he has done an excellent job in those roles. Today the Board and I are pleased to take the next step in our management succession plan by recognizing Leo's leadership abilities and naming him CEO and President. His exceptional customer focus and comprehensive knowledge of the industry have contributed significantly to MKS' success over the years. As Executive Chairman, I look forward to staying actively involved in MKS' strategy and technology roadmaps and continuing to work with Leo as we build on our strong track record."

Mr. Berlinghieri, 52, has served as President and Chief Operating Officer since April 2004, after being named Vice President and Chief Operating Officer in July 2003. Previously, he served as Vice President, Global Sales and Service, and has had

responsibility for operating positions in manufacturing, supply chain management and customer service during his 24 years with MKS.

Mr. Berlinghieri said, "I am pleased to have the opportunity to lead one of the strongest companies in our sector. We have a broad technology portfolio, a skilled and experienced management team, and a strong balance sheet. Today we are providing higher value solutions that support the growing need for process control as the semiconductor industry transitions to larger and more valuable wafers. Going forward, we will continue to work closely with customers to strive to meet and anticipate next-generation process control challenges and grow our share in semiconductor and other markets."

MKS Instruments, Inc. is a leading worldwide provider of process control solutions for advanced manufacturing processes such as semiconductor device manufacturing; thin-film manufacturing for flat panel displays, data storage media, architectural glass and electro-optical products; and technology for medical imaging equipment. Our instruments, components and subsystems incorporate sophisticated technologies to power, measure, control, and monitor increasingly complex gas related semiconductor manufacturing processes, thereby enhancing our customers' uptime, yield and throughput, and improving their productivity and return on invested capital.

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