

AMI/UPRM RESEARCH AGREEMENT

Corporation: AMI Microsensors, Inc
Address: 15800 Crabbs Branch Way Suite 300
Rockville, MD 20855

University: University of Puerto Rico at Mayagüez
Address: P.O. Box 9000
229 N Post Street
Mayagüez, PR 00681

Effective Date: February 15, 2001

RECITALS

- A. AMI Microsensors, Inc. (hereafter known as AMI) desires to contribute to the advancement of science and higher education. AMI also desires to sponsor research projects of interest to AMI business. AMI also desires to use the results of such research projects in AMI's business.
- B. University of Puerto Rico at Mayaguez (hereafter known as University) desires to engage in research project to provide educational opportunities for its students and to contribute to the advancement of science.
- C. The parties desire by this Agreement to establish a joint research program between AMI and University and to set out the legal rights and interests of the parties respecting such joint research.

THE PARTIES THEREFORE AGREE:

1. Definitions

- 1.1. "Intellectual Property" means any potentially patentable idea conceived and reduced to practice under the Project Proposal of this research agreement and shall also include any software (whether patentable or copyrightable) conceived and reduced to practice under the Project Proposal of this research agreement.
- 1.2. "Background IP" means any intellectual property existing prior to or during the Research Project not arising from a Research Project regardless of when or by whom the intellectual property was created.
- 1.3. "Project Results" means (a) any tangible item, such as a document (in any recorded form), a computer program, a database or knowledge base, or a piece of equipment and any intangible item such as data, information, ideas and concepts whether or not patentable arising from any stage of a Research Project.
- 1.4. "Research Project Proposal" means a document in the form of Exhibit I defining a Research Project.
- 1.5. "Research Project" means a project undertaken by the parties in accordance with a Research Project Proposal.
- 1.6. "University Personnel" means any faculty member or other person employed by the University and any graduate or undergraduate student of the University.

2. Research Projects

2.1 **Research Project Proposal.** AMI and University hereby establish a cooperative research program. This research program may involve more than one Research Project. Either party may propose research projects from time to time. When one party proposes a Research Project the parties will confer. If they agree to the Research Project they will prepare a written Research Project Proposal in the form of Exhibit 1. When both parties have signed the Research Project Proposal, it will become a part of this Agreement. Any changes in a Research Project Proposal, including a change of the principal investigator, will be effective only upon the mutual written consent of the parties.

2.2 **Reports and Technology Transfer.** University will provide AMI regular reports on the progress of each Research Project and a report upon conclusion or termination of a Research Project. In addition, University will provide AMI with copies of any technical reports arising from a Research Project. University will transfer the technology of the Research Project to AMI and will provide reasonable support to AMI as needed to ensure the success of the technology transfer so that AMI can use the results of the Research Project in AMI's business.

2.3 **Research Project Duration.** The duration of a Research Project will be stated in the Research Project Proposal. Research Projects may be terminated early or extended by agreement of the parties. Either party may unilaterally terminate its participation in any Research Project at any time upon giving at least thirty (30) days prior written notice. If AMI terminates its sponsorship of a Research Project, AMI will pay all costs up through the termination date and all non-cancelable obligations made by University before receipt of notice of termination, even if they extend beyond the termination date. If University terminates its participation in a Research Project, AMI will pay all costs up through the termination date.

2.4 **Research Project Funding.** The Research Project Proposal will include a budget that states AMI financial obligation in cash and equipment for that Research Project. The budget will be designed to reimburse University for its direct and indirect costs of conducting the Research Project. University will endeavor to perform the Research Project within the budget. If the budgeted amount is exhausted but the Research Project is not completed, the parties may by written agreement provide for additional funding. In the absence of such an agreement, neither party is obligated to provide any additional funds for the Research Project.

3. Equipment

3.1 **Ownership of AMI Equipment.** University will own any equipment and other items purchased with funds provided by AMI. University will own any equipment furnished by AMI in partial satisfaction of financial obligation to fund a Research Project. AMI will own any equipment that AMI loans to the University for use in a Research Project, and such loaned equipment will be returned to AMI upon the conclusion of the Research Project.

3.2 **Maintenance and Risk of Loss.** The parties may provide in the Project Proposal for maintenance, damage and loss of AMI equipment in a Research Project. If the parties make no provision for such matters, then the party having physical possession of the equipment will be responsible for maintenance, damage and loss.

4. Visiting Scientists

AMI may send one or more AMI employees, as identified in a Project Proposal, as visiting scientists to work in the University's facilities under the direction of the Principal Investigator. Similarly, University may send University Personnel, as identified in a Project Proposal, as visiting scientists to work in AMI facilities. The technical qualifications of each visiting scientist will meet the receiving party's reasonable requirements. Each

visiting scientist will remain an employee of the sending party and will be treated as such in terms of salary, worker's compensation, taxes, employee benefits and obligations. Unless the parties agree otherwise, the receiving party at its expense will provide a computer workstation, computer network connection, and office facilities for each visiting scientist, and the sending party will pay all other costs incurred by the visiting scientist.

5. Intellectual Property

5.1 Research Project Participants. University will only permit University Personnel to work on a Research Project. University will ensure that all University Personnel associated with a Research Project have been made fully aware of the terms of this Agreement and the applicable Project Proposal. University will obtain written agreements respecting confidentiality and ownership of intellectual property with all University Personnel associated with a Research Project sufficient to enable University to meet its obligations to AMI under this Agreement.

5.2. Confidential Information.

5.2.1 Either party may from time to time disclose confidential information to the other in connection with a Research Project. The recipient of such information will use it only for that Research Project and will protect the information by using the same degree of care, but no less than a reasonable degree of care, to prevent the unauthorized use, dissemination, or publication of the information as the recipient uses to protect its own confidential information of like nature.

5.2.2 The obligation to keep information confidential will only extend to confidential information that (a) is marked as confidential at the time of disclosure or (b) is unmarked (e.g. orally disclosed) but treated as confidential at the time of disclosure and designated as confidential in a written memorandum within thirty days of disclosure, summarizing the confidential information sufficiently for identification.

5.2.3 The obligation to keep information confidential will expire three years after the date the information was disclosed. The obligation to keep information confidential does not extend to any information that was in the recipient's possession before receipt from the discloser, or that is or becomes a matter of public knowledge through no fault of the recipient, or that is rightfully received by the recipient from a third party without a duty of confidentiality, or that is independently developed by the recipient, or that is disclosed to a third party by the discloser without any duty of confidentiality on the third party, or that is disclosed under operation of law.

5.2.4 If any University Personnel visits the premises of AMI or if any AMI employee visits the premises of the University, in connection with the Research Project, any information input made by such visitor into any work or business of the visited party not covered by the research program may be taken by such visited party to be non-confidential unless explicitly otherwise indicated prior to the input being given. Any information regarding any work or business of the visited party not covered by the Research Project the visitor is involved in and that the visitor may learn whilst visiting will be treated by the visitor and the visiting party as confidential information of the visited party unless otherwise informed by the visited party.

5.2.5 AMI may communicate any confidential information received under this Agreement to other AMI divisions and to AMI subsidiaries. Any such subsidiary will be bound by the terms of this Agreement respecting such information.

5.3 Rights in Data and Publication

5.3.1 A party desiring to publish or otherwise disclose any research performed under this Agreement will submit a copy of its proposed publication to the other party at least thirty days prior to submission for publication or public disclosure. The other party will then have thirty days to review the proposed publication for the limited purpose of determining whether the proposed publication discloses patentable subject matter or confidential information belonging to the reviewing party. If the reviewing party does not respond within thirty days, the publishing party may proceed with publication or public disclosure. If the reviewing party determines that the proposed publication contains patentable subject matter, the publishing party will either remove such subject matter or delay publication or public disclosure for up to six months to permit the reviewing party to file a patent application. If the reviewing party determines that the proposed publication contains confidential information, the publishing party will delete such information prior to publication or public disclosure.

5.3.2 Each party will acknowledge the contributions of the other in any publication, as scientifically and professionally appropriate.

5.4 Background IP

5.4.1 At the earliest opportunity during discussions concerning a proposed Research Project, University will notify AMI of any Background IP of which relevant University personnel related to the Research Project are aware that may be relevant to the Research Project. Relevant University personnel include the Principal Investigator and personnel under his/her direction in the Research Project. If at any time during a Research Project, relevant University personnel become aware of any such Background IP, University will promptly notify AMI thereof.

5.4.2 Neither party will knowingly use Background IP in a Research Project unless the other party gives written permission.

5.4.3 Except as otherwise agreed by the parties with respect to a particular Research Project, University hereby grants AMI a non-exclusive, world-wide, perpetual, irrevocable, paid-up, royalty-free license in Background IP relevant to the Research Project and owned or controlled by University, this license being of sufficient scope to permit AMI to fully exercise its rights in Joint and University Intellectual Property arising from each Research Project; the license includes the right to make, have made, use, offer to sell, sell and import products; the right to practice methods; and in the case of software the right to reproduce, make derivative works, publicly distribute, publicly perform, publicly display and sublicense end users to use. The license includes a limited right of sublicense to enable third parties to include in their products features that interoperate with AMI's products.

5.5 Inventions and Software

5.5.1 Duty of Disclosure. Each party will require each person who works on a Research Project promptly to disclose to that party all inventions and software (whether or not patentable) conceived or reduced to practice by that person in the course of the Research Project.

5.5.2 Project Review Meeting. The parties will conduct a project review meeting at the end of each phase of a Research Project and at the conclusion or termination of the Research Project, but in no event less often than annually. During the project review meeting the parties will prepare a summary list of all inventions and software arising from the Research Project and not considered in any previous project review meeting. Each item on the list will be identified as either AMI Intellectual Property, Joint Intellectual Property, or University Intellectual Property according to whether it was created solely by AMI employees, jointly by AMI employees and University Personnel, or solely by University Personnel, respectively.

5.5.3 Disposition of AMI Intellectual Property. All listed items identified as AMI Intellectual Property will belong to AMI. AMI hereby grants University a non-exclusive, royalty-free, paid-up, perpetual, irrevocable, worldwide license to use all such items for the purposes set forth in paragraph 5.6 below.

5.5.4 Disposition of Joint Intellectual Property. All items listed as Joint Intellectual Property will belong to both parties. Each party may exploit any such item with no duty to account to the other except as provided in this paragraph.

5.5.4.1 Within ninety days after the project review meeting, AMI will notify University in writing that AMI either does or does not desire an exclusive license in any listed item. If AMI fails to give such notice respecting any listed item, it will be presumed that AMI does not desire an exclusive license therein.

5.5.4.2 University will not disclose or offer to license any listed item to any third party within the ninety-day period.

5.5.4.3 After the expiration of the ninety-day period, University may disclose or license (on a non-exclusive basis) any listed item in which AMI does not desire an exclusive license to any third party on any terms University desires.

5.5.4.4 University will not disclose or offer to license to any third party any listed item in which AMI desires an exclusive license for a period of 180 days after the project review meeting. If the parties do not agree on the terms of such license during that period, University may disclose or license (on a non-exclusive basis) the item to any third party on any terms University desires.

5.5.4.5 If the parties agree on an exclusive license in an item of Joint Intellectual Property) AMI will inform University whether AMI desires the license to be backed up by patent or in the case of software by copyright (or both). If AMI desires copyright protection, University will register a claim of copyright at AMI's expense. If AMI desires patent protection, AMI will inform University of the countries in which AMI desires such protection and University will apply for patent protection in those countries at AMI's expense. AMI may at any time inform University that AMI will no longer pay for patent prosecution or maintenance in any country. In such event AMI will no longer be entitled to an exclusive license in that country and University will have no obligation to continue to apply for or maintain the patent in such country.

5.5.4.6 Either party may at its expense apply for patent protection on any item of Joint Intellectual Property in any country in which AMI has not elected an exclusive license or in which AMI has elected not to continue paying for patent prosecution or maintenance. However, the parties will endeavor to cooperate in preparing, filing and prosecuting any such patent applications. At a minimum each party will consult with the other prior to filing any such patent application.

5.5.4.7 Unless otherwise agreed with respect to a particular license, any exclusive license granted to AMI hereunder will include the right to make, have made, use, offer to sell, sell and import products; the right to practice methods; and in the case of software, the right to reproduce, make derivative works, publicly distribute, publicly perform, publicly display and sublicense end users to use.

5.5.5 Disposition of University Intellectual Property. All items listed as university Intellectual Property will belong to University.

5.5.5.1 Non-Exclusive License. University hereby grants AMI a non-exclusive, royalty-free, paid-up, perpetual, irrevocable, worldwide license in each item of University Intellectual Property. This license includes a limited right of sublicense to enable third parties to include in their products features that interoperate with AMI's products. An example of such a feature is a driver for an AMI sensor.

5.5.5.1.1 In any jurisdiction in which any such item of University Intellectual Property is protected by patent, copyright or other governmental grant of rights, this license includes the right to make, have made, use, offer to sell, sell and import products; the right to practice methods; and in the case of software the right to reproduce, make derivative works, publicly distribute, publicly perform, publicly display and sublicense end users to use.

5.5.5.1.2 In any jurisdiction in which any such item of University Intellectual Property is not protected by patent, copyright or other governmental grant of rights, this license means that University will not attempt to prevent or restrict AMI from making, having made, using, offering to sell, selling and importing products; from practicing methods; and in the case of software, from reproducing, making derivative works, publicly distributing, publicly performing, and publicly displaying the software, or from sublicensing end users to use the software.

5.5.5.2 Exclusive License. Within ninety days after the project review meeting, AMI will notify University in writing that AMI either does or does not desire an exclusive license in each listed item of University Intellectual Property. If AMI fails to give such notice respecting any listed item, it will be presumed that AMI does not desire an exclusive license therein.

5.5.5.2.1 University will not disclose or offer to license any listed item to any third Party within the ninety-day period.

5.5.5.2.2 After the expiration of the ninety-day period, University may disclose or license (on a non-exclusive basis) any item in which AMI does not desire an exclusive license to any third party on any terms University desires.

5.5.5.2.3 University will not disclose or offer to license to any third Party any listed item in which AMI desires an exclusive license for a period of six months after the project review meeting. If the parties do not agree on the terms of such license during the six-month period, University may disclose or license (on a non-exclusive basis) the item to any third party on any terms University desires.

5.5.5.2.4 If the parties agree on an exclusive license, AMI will inform University whether AMI desires the license to be backed up by patent or in the case of software by copyright (or both). If AMI elects patent protection, AMI will inform University of the countries in which AMI desires such protection. University will apply for patent protection in those countries at AMI's expense. AMI may at any time inform University that AMI will no longer pay for patent prosecution or maintenance in any country. In such event AMI will no longer be entitled to an exclusive license in that country and University will have no obligation to continue to apply for or maintain the patent in such country.

5.5.5.2.5 University may at its expense apply for patent protection on any item of University Intellectual Property in any country in which AMI has not elected an exclusive patent license or in which AMI has elected not to continue paying for patent prosecution or maintenance. However) the parties will endeavor to cooperate in preparing, filing and prosecuting any such patent applications. At a minimum University will consult with AMI prior to filing any such patent application. University may license (on a non-exclusive basis) any resulting patent in that country to any third party on any terms University desires.

5.5.5.2.6 If AMI elects an exclusive copyright license in software, University will register a claim of copyright at AMI's expense.

5.5.5.2.7 Unless otherwise agreed with respect to a particular license, any exclusive license granted hereunder will include the right to make, have made, use, offer to sell, sell and import products; the right to practice methods; and in the case of software the right to reproduce, make derivative works, publicly distribute, publicly perform, publicly display and sublicense end users to use.

5.5.5.2.8 The non-exclusive license granted to AMI under Paragraph 5.5.5.1 above will remain in effect regardless of any proceedings under this Paragraph 5.5.5.2 respecting an exclusive license.

5.5.6 License Terms. Unless otherwise agreed in a particular license, any license granted to AMI will inure to the benefit of AMI subsidiaries and any exclusive license granted to AMI will include the right of sublicense.

5.6 Research Use of Project Results. Both parties may use any and all Project Results, and Background IP, free of charge, for their own internal research, testing and teaching purposes. Neither party will grant any license to any third party that would conflict with any such use.

5.7 Non-protected Project Results. Either party may as it desires exploit any Project Results that are not protected by any patent, copyright or other legally enforceable intellectual property right, provided that neither party will disclose or exploit the other's confidential information without permission.

6. Notices

Any notice given under this Agreement will be in writing, will reference this Agreement, and will be deemed to have been given

- when personally delivered,
- when sent by confirmed telex or facsimile,
- five days after having been sent by mail with return receipt requested, or
- one day after deposit with an overnight courier that provides verification of receipt.

All communications will be sent to the addresses set forth above or to such other address as may be designated by a party by giving written notice to the other party.

7. Indemnity: Exclusion of Liability

7.1 Exclusion of Liability. Except as specifically provided elsewhere in this Agreement, UNIVERSITY AND AMI MAKE NO REPRESENTATIONS, WARRANTIES OR CONDITIONS, EXPRESSED OR IMPLIED, REGARDING THEIR PERFORMANCE UNDER THIS AGREEMENT OR ANY RESEARCH PROJECT PROPOSAL, INCLUDING BUT NOT LIMITED TO MERCHANTABILITY AND FITNESS FOR ANY PARTICULAR PURPOSE OF ANY PROJECT RESULTS, and neither party will be liable for indirect, special, consequential, or incidental damages as a result of the other party's use of any Project Results.

7.2 Product Liability Indemnity. AMI will indemnify, hold harmless and defend University against any claims, demands, actions, liability and expenses asserted on a product liability theory for bodily injury or property damage alleged to have been caused by AMI's development, testing, manufacture, sale, disposition, disposal, or use of any product based on any Project Results, provided that University gives prompt notice to of any third party claim, tenders the defense thereof to AMI, permits AMI to control the defense (including settlement), and reasonably cooperates in the defense at AMI's request and at AMI's expense.

8. Terms and Termination

8.1 This Agreement begins on the Effective Date and ends in five years with option to renew if both parties consent.

8.2 At any time either party may terminate this Agreement without penalty by a written notice specifying a termination date at least thirty (30) days subsequent to the date of the notice. Any Research Project that is active as of the termination date will automatically terminate on that date, and the settlement of costs will be governed by Paragraph 2.3 on the basis that the party, which terminated this Agreement, will be deemed also to be the party that terminated the Research Project.

8.3 If one of the parties breaches any of its obligations under this Agreement or any Project Proposal and

such breach has, or is likely to have, a material effect on the other party, the other party may give written notice to the breaching party calling upon it to comply with its obligations within a specified term of not less than thirty days. If at the expiration of this term the breaching party has not cured its breach, the other party shall have the right to immediately terminate this Agreement or any Project Proposal in writing. Termination of this Agreement for breach will also result in the simultaneous termination of any active Research Projects. The settlement of costs for terminated Research Projects will be governed by Paragraph 2.3 on the basis that the party in breach will be deemed to be the party that terminated the Research Project. Termination for breach will be in addition to any other remedy to which the terminating party is entitled.

8.4 The provisions of Paragraph 2.2, Article 5, and Article 7 will survive the expiration or termination of this Agreement. If any Research Project remains active past the expiration or termination of this Agreement, the terms of this Agreement will remain in effect as to that Research Project until completion thereof and satisfaction of the various rights and obligations in Article 5.

9. Miscellaneous Clauses

9.1 Export Laws. Each party will adhere to all applicable laws, regulations and rules relating to the export of technical data, and will not export or reexport any technical data, the direct product of such technical data, or any products received from the other party, to any proscribed country listed in such applicable laws, regulations and rules unless properly authorized.

9.2 Relationship of the Parties. The parties are independent contractors. Nothing in this Agreement will constitute the parties as entering into a partnership, joint venture, or agency relationship.

9.3 Entire Agreement. This Agreement is the entire understanding between AMI and the University with respect to the subject matter thereof and merges all prior agreements, dealings and negotiations. No modification, alteration or amendment will be effective unless in writing and signed by both parties.

9.4 No Assignment. Neither party may assign its rights or obligations unless the other gives written consent. Any attempted assignment without such consent will be voidable at the option of the non-assigning party.

9.5 Governing Law. This Agreement will be governed by the laws of the State in which AMI maintains its primary offices, the State of Maryland.

SIGNATURES

AMI Microsensors, Inc.

By: 

Signature

Chih-Hsiang Li

Typed Name

University of Puerto Rico at Mayagüez

By: 

Signature

Zulma R. Toro-Ramos, Ph.D.

Typed Name

ECV

Title

2/8/2001
Date of Signature

Title

2/8/2001
Date of Signature

Exhibit 1: Form of Research Project Proposal

Title of Research Project: _____

Name(s) of Principal Investigator(s): _____

Effective date of this Proposal: _____

Period of performance: _____

Reports and other deliverable items: _____

AMI equipment to be loaned to the University: _____

AMI Visiting Scientists and duration of visits: _____

Financial terms:

- Direct and indirect costs of research: _____
- Amount to be funded by AMI: _____
- Approximate value of any equipment to be furnished by AMI: _____
- Payment terms: _____

Attachments:

- Itemized budget: _____
- Statement of work: _____

Research Project Authorization

AMI Microsensors, Inc.

University of Puerto Rico at Mayaguez

By: _____
Signature

By: _____
Signature

Typed Name

Typed Name

Title

Title

Date of Signature

Date of Signature