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CONVEYING PARTY DATA

Name	Execution Date
CAITLIN BROWNING	04/15/2014
AMELIA CAMPBELL	04/15/2014
STEVE WILLIAMS III	05/02/2014
BRADEN NICHOLS	05/02/2014

RECEIVING PARTY DATA

Name:	CLEMSON UNIVERSITY RESEARCH FOUNDATION
Street Address:	P.O. BOX 946
City:	CLEMSON
State/Country:	SOUTH CAROLINA
Postal Code:	29633

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14464206

CORRESPONDENCE DATA

Fax Number: (202)628-8844

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 202-624-2500 Email: afield@crowell.com

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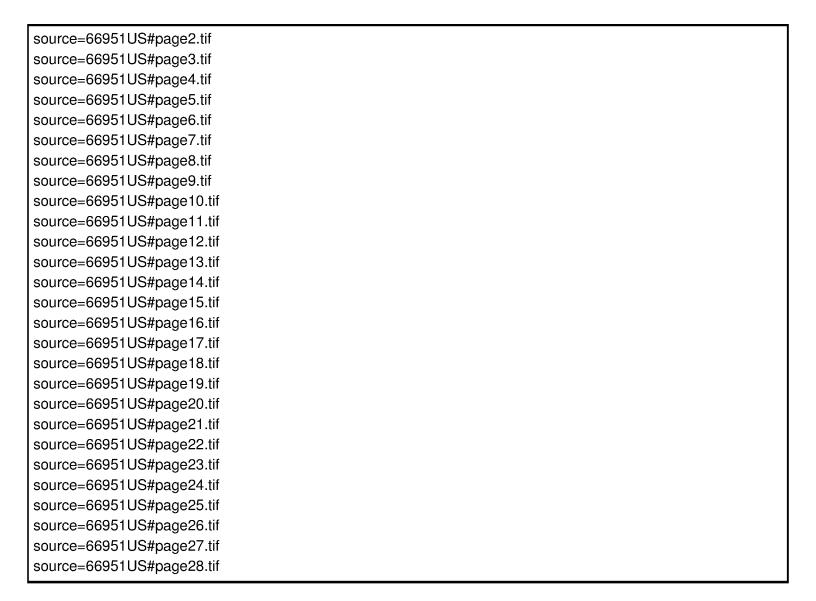
Address Line 1: P.O. BOX 14300

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ATTORNEY DOCKET NUMBER:	080437.66951US	
NAME OF SUBMITTER:	JEFFREY D. SANOK	
SIGNATURE:	/Jeffrey D. Sanok/	
DATE SIGNED:	05/30/2017	

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> **PATENT** REEL: 042551 FRAME: 0001 504389341



PATENT REEL: 042551 FRAME: 0002



United States Patent And Trademark Office

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March 31, 2017

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PATENT

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CAITLIN BROWNING	04/15/2014
AMELIA CAMPBELL	04/15/2014
STEVE WILLIAMS III	05/02/2014
BRADEN NICHOLS	05/02/2014

RECEIVING PARTY DATA

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Street Address:	P.O. BOX 946
City:	CLEMSON
State/Country:	SOUTH CAROLINA
Postal Code:	29633

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Fax Number: (202)628-8844

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Phone: 202-624-2500 Email: afield@crowell.com

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DATE SIGNED:	02/23/2017

Total Attachments: 26

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Clemson University Intellectual Property Policy

Approved by Executive Leadership Team – November 21, 2016

1. Introduction and Scope.

- a) Clemson University is a land-grant university and embraces the land-grant mission of research, teaching and public service. The University encourages research and scholarship and recognizes that inventions, discoveries, and creative works may arise from the scholarly activities of the University. Clemson promotes the use of such intellectual property for the public good and encourages development and commercialization of inventions, discoveries, and creative works through patenting or copyrighting.
- b) Clemson may designate one or more commercialization agent(s) for the intellectual property of the University. To accomplish this, Clemson University shall assign to such agent(s) the rights, title, and interest to certain intellectual property created, invented, or discovered by Clemson faculty, staff, students, and others for the purpose of evaluation, filing for appropriate legal protection, marketing, and development.
- c) Faculty and staff governance and review, through the Intellectual Property Committee (IPC), will play a primary role in setting and revising University intellectual property policies and processes. The IPC shall recommend changes or revisions to this Policy to the Vice President for Research (VPR).
- **d**) All rights in intellectual property subject to this policy shall be allocated in accordance with this intellectual property policy and other University policies. The Appendices to this Policy provide additional information and serve to implement and may further define the Policy.

2. Individuals Subject to this Policy.

This intellectual property policy applies to:

- a) All persons employed by, paid by, or under contract with Clemson University, unless expressly exempted by contract, including, but not limited to, full and part-time faculty and staff and visiting faculty members and researchers, consultants, and students.
- **b**) Students working on sponsored projects and/or who use Clemson University resources other than for lecture-based coursework or other course-related assignments.
- c) Anyone using the facilities or resources of the University, as defined in Section 4 below, or the facilities of any entity affiliated with Clemson University for the purposes or in the manner described in Section 5 below.

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3. Types of Intellectual Property Subject to this Policy.

Except as set forth in other related University policies, this policy applies to all types of intellectual property, including, but not limited to, any invention, discovery, creation, know-how, trade secret, technology, scientific or technological development, mask work, trademark, research data, work of authorship, and computer software regardless of whether subject to protection under patent, trademark copyright, or other laws.

- **4. University Resources**. For purposes of this policy, *use of university resources*:
 - a) Means the use of university funds, facilities, equipment, personnel, tangible or intangible research materials, information and/or materials that are not publicly or freely available to the public, and funds provided through externally funded grants, contracts, or other types of awards or agreements with third parties including gifts to the University, and anything not covered in subsection (b) below.
 - **b)** Does not include the use of University designated office space, routinely available office-type equipment such as desktop personal computers, and the University library facilities.
- **5. Determination of Ownership Rights in Intellectual Property.** Unless provided for otherwise in this policy, the University retains all rights to any intellectual property conceived, created, developed, fixed, or first actually reduced to practice by a Creator.

a) Copyright Ownership.

Clemson University, however, recognizes the long standing academic tradition that faculty own the copyright to academic, scholarly and educational works resulting from their research, teaching, and writing (collectively called "Scholarly Academic Works" as further defined below). Further, ownership of copyright is often critical to innovation and creativity.

"Scholarly Academic Works" are those copyrightable items produced by a faculty member in the performance of their academic duties such as but not limited to: 1. Books, journal articles, texts, glossaries, bibliographies, study guides, laboratory manuals, syllabi, tests, and survey instruments; 2. Lectures and unpublished lecture notes; 3. Films, slide programs, charts, transparencies, pictorials, graphics and other visual aids; 4. Video and audio tapes and cassettes; 5. Live video or audio broadcasts; 6. Programmed instruction materials, including websites and blogs; 7. Creative works such as novels, poems, and musical works; 8. Dramatic works including any accompanying music, pantomimes and choreographic works, pictorial, graphic and sculptural works, motion pictures and other similar audio-visual works, and sound recordings; 9. Class notes; 10. Courseware; 11. Creative and Scholarly Works; 12. Teaching Notes; 13. Presentations fixed in a tangible medium.

PAT理例可²⁰ REEL: 042551 FRAME: 0006 (1) Work for Hire (non-faculty): The University is the owner of the copyright and retains all rights therein when an employee creates a work that is a work-for-hire (as defined by the US Copyright Law) except where that employee is a faculty member.

(2) Faculty:

- (a) When the creator of a Scholarly Academic Work is a faculty member, ownership of the copyright in that work and all rights therein are retained by the faculty member except in the following situations:
 - i. The work is supported by a direct allocation of funds through the University for the pursuit of a specific project, or
 - ii. The work is a Commissioned Work by the University, or
 - iii. The Creator of the work makes Substantial Use of University Resources or personnel (see Section 4, above), or
 - iv. The work is otherwise subject to contractual obligations involving the University.
- (b) Prior to the production and/or distribution of Scholarly Academic Works as defined in 5(a)(2)(a)(i-iv) above, the Creator(s) shall enter into an agreement with the University regarding the disposition of the materials to be developed, including delineating ownership and rights of use, unless obviated or otherwise prohibited by the contractual obligations referenced under 5(a)(2)(a)(iv) above.

Examples of arrangements that should be contemplated under this section 5(a)(2)(b):

- i. For a situation that specifies university ownership and commercialization of the work through Clemson University's commercialization agent, the agreement should employ the same general principles that are applicable to patents, specifying a share of net income to the Creator based on sales.
- ii. For situations such as when the development of educational materials are to be broadly distributed by the university and revenues are generated, then compensation through the redistribution of funds should be mutually agreed upon in advance by the Creator(s) and the units involved. Examples include:
 - a) online certificate programs where Professional Development Program (PDP) fees are charged.
 - b) online courses open to students not currently enrolled at Clemson.
 - c) videos of recorded lectures or other Creator content.

(c) Notes:

(i) Research data or results created by an employee are owned by the University and, except to the extent that rights to such research data have not been contractually assigned or licensed to a third party, the Creator shall have a nonexclusive, perpetual

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license to use such data for nonprofit educational research and scholarly purposes within the scope of the employee's employment, subject to other provisions of this policy. Inventorship shall be determined in accordance with United States Patent Law.

- (ii) Notwithstanding anything to the contrary herein, the University is granted a limited royalty free perpetual and irrevocable non-exclusive license to use the Scholarly Academic Works to the extent needed for (1) regular University business such as accreditation; course review and curriculum committees; tenure, promotion, and review; and the handling of grievances; and (2) the provision of educational content in a University course by the Creator (for the avoidance of doubt, the intent of this clause is to confirm that no royalty will be due to the Creator by the University for the Creator's use of their Scholarly Academic Works in the performance of the Creator's educational duties for the University).
- (iii) Software and Mask Works to the extent they are protected by copyright are owned by the University and treated as results of research under (i) above excepting for the software that is an integral part of a Scholarly Academic Work (e.g. html code that is part of an online course) which shall be treated as part of the Scholarly Academic Work.

b) Student Ownership Exception.

Unless one or more of subparts 1-4 below applies, students own the copyrights in their theses and dissertations. Students who author or create copyrighted works which are submitted to meet course requirements own the copyrights in such works, even if they have been created using University facilities. The course instructor may not utilize or distribute student-owned copyrighted works for purposes beyond those of the course in which they are submitted without obtaining the written permission of the student. If intellectual property is developed or generated as a group class project, joint ownership by the collaborators will be assumed unless a prior written agreement exists among the collaborators.

Student Creators do not hold the rights to intellectual property created, developed, or generated:

- i. In the course of rendering compensated services to the University; or
- As part of sponsored research or projects; or ii.
- Pursuant to an agreement that requires the University and/or student to assign iii. his or her rights either to the University or to a third party; or
- Using pre-existing or background intellectual property belonging to the iv. University or to a third party with whom the University has a contract under which such background intellectual property rights are already allocated.

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c) Other. There may be instances when University faculty, staff, students, and/or others enter into written agreements with the University to collaborate in the development of intellectual property. These agreements may provide for allocation of intellectual property rights in a manner that is not consistent with this Policy. Each such agreement shall be valid only when approved by the Vice President for Research (VPR) after review by the IPC. While each agreement may contain unique provisions, all such agreements must require disclosure of any intellectual property in accordance with the terms of this Policy.

6. Use of Facilities and Resources.

Unless authorized or allowed under a University policy, the Clemson University facilities and resources shall not be used to:

- a) Create, develop, or commercialize intellectual property outside the course and scope of employment and/or University related-responsibilities of the individual; or
- b) To further develop or commercialize intellectual properties that have been licensed, released, or are otherwise subject to third party interests except as approved by the VPR in instances where the University has retained an interest under the terms of the license or release.
- 7. Applicable Laws. The provisions of this Policy are subject to any applicable laws and regulations. Grants or contracts between external sponsors and the University under which intellectual property is produced may contain specific provisions with respect to disposition of rights to such property that may differ from those contained in this policy. Under the terms of certain contracts and agreements between the University and various agencies of government, private and public corporations, and private interests, the University may be required to license patent rights to the contracting party. Clemson retains the right to enter into such agreements whenever such action is considered to be both in its best interest and in the public interest.

8. Publication.

Faculty, staff, students, and others may contract with third parties to publish their own research results and other scholarly information unless there are contractually imposed restrictions or temporary restrictions imposed to protect intellectual property that may be the subject of an application for intellectual property protection.

9. Disclosure of Intellectual Property.

All Creators have a duty to promptly disclose any intellectual property authored, invented, created, discovered, developed, or generated by Creator(s) to the Clemson University Intellectual Property Committee (IPC) in accordance with the procedures in Appendix III.

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10. **Assignment of Intellectual Property.**

- a) If any intellectual property is determined, in accordance with this policy, to be owned by Clemson University, Clemson University may, at its sole discretion, assign all rights, title, and interests to one or more designated commercialization agents.
- b) Faculty, staff, students, and others may not assign or license intellectual property owned by the University without the written consent of the University or its designated commercialization agent(s), as applicable. The University has the ultimate right to resolve any conflicts relating to ownership of intellectual property rights arising in connection with contracts between the University and third parties or organizations.
- c) In the event that faculty, staff, students, or others are Creators of intellectual property owned by an external entity and the intellectual property does not fall within the scope of this Policy, (e.g., it is not the subject of an agreement between the external entity and the University/its designated commercialization agent(s)) this intellectual property policy will not apply. Neither Clemson University nor its designated commercialization agent(s) will have any obligations with regard to negotiation of terms and conditions, patenting, licensing, or royalty distribution.
- d) When using outside consultants/independent contractors to perform work for the University that is not specifically identified in a sponsored research or other contract, there must be a written agreement established through procurement or other University policies/mechanisms ensuring proper assignment of intellectual property.
- e) Any special cases and unique situations relating to intellectual property and not specifically covered by this policy or any other University policy, or which arise because of conflict(s) of interest, shall be brought to the IPC and an appropriate recommendation submitted by it to the University Administration.

11. **Appeal Process.**

- a) A Creator may appeal a decision or determination made pursuant to this policy by submitting an appeal in writing to the Intellectual Property Committee (IPC) within thirty (30) days of receiving notice of the decision or determination.
- b) The IPC shall review the appeal and make a recommendation to the VPR who will render a decision in writing within 30 days of receiving the recommendation from the Committee.

12. Infringements.

Faculty, staff, and students should notify the University Office of Technology Transfer of any potential infringement of protected University intellectual property.

Approved by Executive Leadership Team November 21, 2016

13. University Holiday Periods.

During the summer sessions and extended University holiday periods, the Intellectual Property Committee (IPC) Chair will have the authority to: a) Expedite the review of intellectual property disclosures deemed time critical, in terms of negotiations with prospective licensees, meeting filing deadlines, and the like; b) initiate negotiations with prospective licensees for patent filing/processing fees or the like; and c) such other activities that are time critical and cannot be delayed for handling at a regular or special called meeting of the committee.

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APPENDIX I

Definitions

- a) "Class" includes a set of educational objectives that are identified in a syllabus and delivered either by an instructor, or under an instructor's supervision and pursuant to the University's policies.
- b) "Class Notes" are notes or other instructional material provided to the participants by the instructor as part of a Class.
- "Copyright" is a form of protection provided to the authors of "original works of authorship" including literary, dramatic, musical, artistic, and certain other intellectual works, both published and unpublished.
- d) "Copyright Income" is defined to include income associated with any copyright disclosure made to the IPC for exploitation, even if the income is received before a copyright application has been filed or a copyright issued, and includes such monies received as royalties, fees, advanced payments, court awarded infringement damages, payments received in settlement of infringement disputes, and the like, calculated after the costs of exploiting the disclosure have been reimbursed to the employee(s) or the University, whichever funded the original exploitation. Some examples of such costs are the cost of securing the appropriate copyright licenses, and other legal efforts as required. Copyright Income shall not include indirect economic benefits resulting from the technological position established by the copyrighted technology or the sale of derived articles or concepts, including such items as a follow-on sponsored programs that uses the copyrighted technology as a basis for future work.
- "Courseware" shall mean educational material in the form of software programs/applications and data (usually digital and/or packaged for use with a computer) and intended for classroom instruction (in class or remotely) or for a selflearning or faculty/coach assisted program.
- f) "Creative and Scholarly Works" shall mean traditional academic publications, such as professional papers published in scholarly journals, or newly created texts published in journals or books.
- g) "Scholarly Academic Works" are those items traditionally produced by University faculty in the conduct of scholarly research and traditional face to face education, such as course notes, handouts, syllabus, lecture notes, etc. Scholarly Academic Works, Courseware, and recorded courses when created by a faculty member as part of their regular university duties would qualify as works for hire under the copyright law. However certain items of academic endeavor have been considered to be exempt from the work for hire doctrine. Clemson University acknowledges that the scholarly

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- works exception is important and valuable for academic freedom and integrity and adopts that exception to the extent set forth in this policy.
- h) "Creator" is defined as an author of, inventor of, or person who discovers, develops, or generates any type of intellectual property. Inventorship and authorship shall be determined in accordance with patent law and copyright law, respectively.
- i) "Commissioned Work" means a work of authorship where the University specifically directed the Creator in writing to create the work. Commissioned Works shall be owned by the University. The University shall be free to use Commissioned Works in its discretion without the payment of additional consideration to the Creator. The Creator retains ownership of any underlying Scholarly Academic Work that was used as part of the Courseware or Recorded Course but grants the University a royalty free perpetual and irrevocable non-exclusive license to the use of such work in the Courseware or Recorded Course. The distribution of any proceeds from commercialization via licensing to an external unaffiliated third party may be addressed in the document commissioning the work but requires the signature of the Provost or the Provost's designee in order to be binding.
- j) "Substantial Use of University Resources" means use of University resources, including personnel other than the Creator, beyond the office, computer, and internet connectivity provided to the Creator by the University.
- k) "Intellectual Property" shall mean any patentable materials, copyrighted materials, trademarks and service marks, software, art and creative endeavors, and trade secrets, whether or not formal protection is sought.
- "Intellectual Property Committee" (IPC) The University's IPC evaluates disclosures prepared by faculty, staff, and students, as appropriate, and then recommends to the Vice President for Research (VPR) whether to obtain appropriate protection for such intellectual property. The composition of the IPC is defined in the Faculty Manual. At the request of the VPR, the IPC also provides clarification of University intellectual property policies and resolves internal University disputes that might arise such as those related to use of University resources, University versus individual ownership of intellectual property, and University income distribution.
- m) "Mask Work" shall mean a series of related images, however fixed or encoded: (i) having or representing a predetermined, three dimensional pattern of metallic, insulating, or semiconductor material present or removed from the layers of a semiconductor chip product; and (ii) in which series the relation of the images to one another is that each image has the pattern of the surface of one form of the semiconductor chip product.
- n) "Patent" refers to the grant of a property right to the inventor, issued by the United States Patent and Trademark Office (USPTO) or foreign analog.

- o) "Patent Income" is defined to include income associated with any patent disclosure made to the IPC for exploitation, even if the income is received before a patent application has been filed or a patent issued, and includes such monies received as royalties, fees, advanced payments, court awarded infringement damages, payments received in settlement of infringement disputes, and the like, calculated after the costs of exploiting the disclosure have been reimbursed to the University. Some examples of such costs include, but are not limited to, the cost of securing the patent, appropriate licenses, and other legal efforts as required. Patent Income shall not include indirect economic benefits resulting from the technological position established by the patented technology or the sale of derived articles or concepts, including such items as follow-on sponsored programs that use the patented technology as a basis for future work.
- p) "Software" shall mean one or more computer programs existing in any form, along with any associated operational procedures, manual, or other documentation, whether or not protectable or protected by patent or copyright. The term "computer program" shall mean a set of instructions and statements of related data that, in actual or modified form, is capable of causing a computer or computer system to perform specified functions.
- **q**) "Teaching Notes" are the personal notes of the instructor regarding the delivery of a Class.
- r) "Trade Secret" shall refer to information that companies keep secret to give them an advantage over their competitors.
- s) "Trademark" is a word, phrase, symbol, or design, or a combination thereof, that identifies and distinguishes the source of the goods of one party from those of others. A "service mark" is the same as a trademark except that it identifies and distinguishes the source of a service rather than a product. The Intellectual Property Committee (IPC) is concerned only with trademark issues that pertain to patented or copyrighted Intellectual Property of the University. All other trademark issues should be directed to the appropriate University officials.
- t) "University" includes Clemson University and all of its administrative units, including but not limited to colleges, departments, centers, institutes, consortia and other similar organizations, regardless of source of funding.

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APPENDIX II

Income Distribution Plan

- a) The goals of this income distribution plan are to create a strong incentive for participation in disclosures, patenting and copyrighting, and technology commercialization processes by sharing income with Creators and with relevant centers, departments, and colleges/unit. All income received by centers, departments, and colleges/unit will be used for research and educational purposes in line with federal regulations.
- b) The elements of Copyright Income and Patent Income shall be as defined in Appendix I.
- c) All income will first be used to reimburse out-of-pocket expenses incurred during the intellectual property protection process or the commercialization process. There shall be a distribution of 15% of net proceeds to the appropriate commercialization agent prior to distribution of funds to Clemson. The amount distributed to such commercialization agent may be modified as appropriate from time to time by the IPC with the approval of the VPR.
- **d)** Clemson shall distribute the remaining aggregate income as follows:

	Initial \$10,000	> \$10,000
Creator (s)	100%	40%
University	0%	60%
Creator Research Funds*	0%	20%
College/Unit**	0%	20%
Intra-University***	0%	20%

- * Creator Research Funds are the portion of the patent income available to the Inventor to be used for research and educational purposes consistent with applicable laws and University policies regarding use of funds. If the Creator leaves Clemson University, these funds are returned to the Creator's budget center.
- ** Each College/Unit will determine distribution to appropriate academic or research unit.
- *** Distribution within the University shall be in accordance with internal policies.
- e) The Creator's share will be divided equally among all Creators unless a prior written agreement establishes an alternative distribution arrangement. The Creator's share will continue to be paid to the Creator even if the Creator leaves the University. Upon death, the Creator's share will become part of the Creator's estate. Creators have the

Approved by Executive Leadership Team November 21, 2016

option of allowing the University to retain their personal share for use in their research program.

Certain intellectual property owned solely by Clemson University, including all marks, (e.g., the Clemson Tiger Paw) shall be solely owned by Clemson University and is not subject to Income Distribution.

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Approved by **Executive Leadership Team** November 21, 2016

APPENDIX III

Intellectual Property Disclosure and Related Procedures.

- a) Creators have a duty to promptly disclose all Intellectual Property to the Intellectual Property Committee (IPC). For disclosure instructions, please complete the Invention Disclosure Form found on the Clemson University website at http://media.clemson.edu/research/technology-transfer/confidential-inventiondisclosure.pdf.
- b) With regard to University owned intellectual property, particularly patents and/or patentable inventions, each Creator has a duty to promptly disclose any intellectual property discovered, conceived, or first reduced to practice to the University IPC prior to disclosing such information to ANY other third party.
- c) When a disclosure of Intellectual Property is received by the IPC, the IPC has a duty to promptly evaluate and provide final disposition of the rights to the intellectual property disclosed to the Committee. The Chair of the IPC shall convene a subcommittee to recommend a preliminary course of action based on the commercial potential of the invention. The subcommittee shall consist of the IPC Chair or his/her designee, the IPC representative from the college of the Creator, and one other member of the IPC Committee to be selected by the Chair. If the particular college or unit is not represented on the IPC, the subcommittee will be composed of the Chair and two members of the IPC appointed by the Chair. The subcommittee has a duty to respond to all requests in a prompt manner, provide the IPC advance notice of any potential delays, and recommend alternative courses of action if unexpected delays are encountered.
- d) After reviewing the relevant materials and conducting discussions with the Creator(s), the subcommittee may recommend to the IPC that additional information be gathered to determine the ownership, legal, competitive, and market issues that have bearing on the patenting, copyrighting, or trademark decision. After that information is collected and evaluated, the subcommittee will recommend to the IPC one of two courses of action:
 - i. Assert its sole interest in the intellectual property in writing and recommend that the University pursue an application for protection using its own financial and legal resources and/or refer the intellectual property to a designated commercialization agent as determined by University's agreement with such commercialization agent;
 - Return or assign sole interest in the Intellectual Property to the Creator(s) for their ii. own pursuits, relinquishing in writing all University interests in said Intellectual Property as well as any related responsibilities for costs and reserving for itself a fee-free and royalty-free, perpetual, irrevocable license to use the Intellectual Property in its academic, research and other non-commercial scholarly endeavors. The agreement between the parties shall be in accordance with Sub-Section i below.

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- e) At its next regular meeting, or sooner if appropriate, the Chair shall present the recommendation to the IPC for action.
- f) For trademark requests, the IPC will make a recommendation to the Responsible Individual/Organization. For trademarks involving the University brand, an invitation to provide input will be extended to one or more representatives from the Publications, Promotions and/or Athletics departments.
- g) If the University pursues a patent or copyright application, its designated commercialization agent shall manage the interactions and timelines with attorneys and the USPTO but will rely on the Creator(s) to provide sufficient technical details and insight so that attorneys will be able to craft the best possible protection.
- h) Pursuit of foreign patent applications will only be recommended to the VPR when: (a) there is substantial justification for the commercial potential of the invention; (b) one or more firms have expressed their intent or made a commitment to license the technology; or (c) a potential licensee will assume all filing and other foreign application costs. Foreign patent applications will be reviewed annually and may be dropped at the University's discretion depending on actual or potential licensing activity. With the University's approval and subject to mutual agreement regarding the allocation of each party's rights, Creators and/or sponsors may request and be granted rights to assume such costs on foreign patent applications.
- i) If a patent is dropped or abandoned, the rights may be released to the inventor(s) subject to a stipulation that any direct patenting costs incurred by the University be reimbursed if the patent generates income. If and when appropriate, income distribution arrangements shall be handled on a case by case basis between the IPC and the inventor(s) and shall be subject to VPR approval. The IPC shall review the status of all disclosures and pending or issued patents provided by the designated commercialization agent in accordance with University policies.

Reassignment to Creator(s) of University Intellectual Property.

i. Should the University, or its designated commercialization agent(s), decide not to assert its rights in and to the Intellectual Property for administration, or if at any future time decide not to take any further action in protection or commercialization of the Intellectual Property, it shall exert reasonable efforts to notify the Creator(s) and, upon request of the Creator(s), and subject to prior commitments or obligations, relinquish in writing all University interests in the Intellectual Property as well as any related responsibilities for costs and release the Intellectual Property to the Creator(s) in accordance with the following:

> 1) The Creator(s) agree to maintain the technology at their expense from the point of the assignment forward;

- 2) The assignment is consistent with any obligations to third parties, including but not limited to unreimbursed fees, any legal obligations, or any approvals from sponsors necessary prior to release; and
- 3) The assignment to the Creator(s) does not involve a conflict of interest.
- 4) In the case of Federal agency sponsorship, any release must be made to the Federal Government, following which the Creator(s) may directly petition the federal agency for a release of the rights to himself or herself. Decisions by the Federal sponsors to permit individual Creator(s) to acquire ownership are generally made on a case-by-case basis with the Federal Government retaining for itself certain rights as provided for in federal patent laws.
- ii. In the case that unreimbursed fees of third parties or unreimbursed fees incurred by the University, or its designated commercialization agent(s), exist, the Intellectual Property may be licensed to the Creator(s) until all fees are repaid. At which time the Creator(s) may be assigned the Intellectual Property pursuant to section (a) above.
- iii. In exchange for such assignment, the Creator(s) shall grant the University a perpetual, irrevocable, fee and royalty free license to use such intellectual property for research, academic and other scholarly purposes of the University.

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APPENDIX IV

Background Information and Special Issues

1. Patents

a. Objectives.

The objectives of the University's policy regarding patents include the following:

- i. Encourage research and scholarship as creative academic endeavors while recognizing that commercially viable inventions may yield benefits to both the University and inventors;
- **ii.** Delineate procedures that assist inventors in reporting discoveries with patent potential and safeguard the interests of all concerned parties;
- **iii.** Make inventions resulting from academic research available to the public and promote their effective utilization and development;
- iv. Provide adequate recognition and incentives to inventors through shares in proceeds from their inventions; and
- **v.** Provide an appropriate framework to recognize the equity of sponsors by allowing reasonable and equitable provisions for the granting of patent rights to the sponsor.
- b. Term. Generally, the term of a new patent is 20 years from the date on which the application for the patent was filed in the United States or, in special cases, from the date an earlier related application was filed, subject to the payment of maintenance fees. U.S. patent grants are effective only within the United States, U.S. territories, and U.S. possessions. Under certain circumstances, patent term extensions or adjustments may be available.
- c. **Protection.** A provisional application may be filed as a "lower-cost first patent filing" to secure an initial filing date for an invention that will be the subject of a corresponding non-provisional application.
 - 1) To retain the initial date, the non-provisional application must be filed within one year of the provisional application filing date.
 - 2) The provisional application does not require a formal patent claim, oath or declaration, or any information disclosure (prior art) statement and allows the inventor to use the term "Patent Pending" when describing the invention.
 - 3) The inventor may convert the provisional application to a non-provisional application by filing a petition within one year of the provisional application filing date; however, the term of the patent associated with the invention will be negatively impacted since the term will be measured from the filing date of the non-provisional application.

d. Ownership.

The rights of Clemson University in patents arising from research will vary in accordance with the University Intellectual Property Policy.

In order to avoid any questions concerning the tax exempt status of financing used for certain University facilities/resources, Clemson shall, with regard to sponsored research activities, seek to:

- i. Retain ownership of inventions arising during performance of research sponsored by any private industry and/or federal Government sponsor and
- ii. Grant to such sponsor(s) any right in the invention under compensation terms that are set after the time when the invention comes into existence and that are at a fair market level of compensation to Clemson. Under the terms of certain contracts and agreements between Clemson and various sponsors, Clemson may be required to license patent rights to the contracting party.
- iii. Clemson retains the right to enter into such agreements whenever such action is considered to be both in its best interest and in the public interest. The University will not agree to grant any rights in future inventions to private corporations or businesses unless such provision is included in the contract that sponsored the work leading to the invention.
- iv. Special cases not covered by the above statements or which arise because of conflict of interest shall be considered by the IPC and an appropriate recommendation submitted to the VPR or appropriate University Administration.
- v. In the absence of an agreement allocating intellectual property rights, and subject to any licensing arrangements and this Policy, Clemson University's policy with regard to ownership of intellectual property is as follows:
 - 1. University shall retain title to all intellectual property including supporting data for all discoveries and/or inventions made exclusively by any individual subject to this Intellectual Property Policy (as described in Article 2).
 - 2. University shall share ownership of intellectual property including supporting data for all discoveries and/or inventions made jointly by any individual subject to this Intellectual Property Policy (as described in Article 2) and a third party.

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e. IPC Responsibilities.

During the summer sessions and extended University holiday periods, the IPC Chair will have the authority to: a) Expedite the review of patent disclosures deemed time critical, in terms of negotiations with prospective licensees, meeting filing deadlines, and the like; b) Initiate negotiations with prospective licensees for patent filing/processing fees or the like; and c) Such other activities that are time critical and cannot be delayed for handling at a regular or special called meeting of the committee.

Record Keeping Guidelines.

Good laboratory practice dictates the use of bound notebooks for record keeping, making entries on a daily basis. This "diary" format provides a day-to-day chronology. Use the notebook to record a conception (a complete description of a means to accomplish a particular purpose or result), laboratory data, and drawings. Each entry should be headed with a title and continued on successive pages. Make entries in ink and do not erase; instead, draw a line through text or drawings to be deleted and enter the material in corrected form. Draw a line through any blank spaces on the page. Separate sheets and photographs pasted to notebook pages should be referred to in an entry. Material that cannot be incorporated in the notebook should be keyed to an entry. Sign and date all entries at the time they are made and have them witnessed by an individual who is capable of understanding the material yet had nothing to do with producing it. Secure additional witnesses when something important or highly unusual is discovered. Remember that an inventor and his or her co-inventor(s) cannot serve as their own witnesses. Records - when made a matter of routine - take only a small amount of time and effort, become an invaluable asset to work in progress, and may ultimately reserve for the inventor those rights to which he or she is, by priority, entitled. Records that support the conception, development and demonstration of a particular intellectual property should be available for review by the IPC and patent counsel at each stage of review of a particular disclosure.

2. Copyrights

a. Introduction and Scope.

Copyright ownership and rights are defined by federal law. Clemson University is committed to complying with all applicable copyright laws, while supporting its stakeholders in exercising good-faith fair use rights and appropriate uses for-in person and distance education activities. University faculty and staff are responsible for complying with applicable copyright law. Use of copyright protected works beyond the exceptions codified in Title 17 of the United States Code is a violation of University policy and the law. Additionally, the University recognizes the longstanding academic tradition that Creators of works own the copyright resulting from their research, teaching, and writing. Exceptions to this rule may result from contractual obligations, from employment obligations, from certain uses of University

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facilities/resources, or by agreement governing access to certain University resources. This Policy addresses these exceptions in Section 5.

The 1976 Copyright Act generally gives the owner of copyright the exclusive right to reproduce the copyrighted work, to prepare derivative works, to distribute copies of the copyrighted work, to perform the copyrighted work publicly, or to display the copyrighted work publicly. The copyright protects the form of expression rather than the subject matter of the writing. For example, a description of a machine could be copyrighted, but this would only prevent others from copying the description; it would not prevent others from writing a description of their own or from making and using the machine.

b. Copyrighted Materials may include the following but are not limited to the following: 1. Books, journal articles, texts, glossaries, bibliographies, study guides, laboratory manuals, syllabi, tests, and survey instruments; 2. Lectures and unpublished lecture notes; 3. Films, slide programs, charts, transparencies, pictorials, graphics and other visual aids; 4. Video and audio tapes and cassettes; 5. Live video or audio broadcasts; 6. Programmed instruction materials, including websites, blogs, mobile applications; 7. Computer programs and documentation; 8. Mask works; 9. Creative works such as novels, poems, and musical works; 10. Dramatic works including any accompanying music, pantomimes and choreographic works, pictorial, graphic and sculptural works, motion pictures and other similar audio-visual works, and sound recordings.

Other materials or works that qualify for protection under the copyright laws of the United States (USC 102).

Ownership. Copyright ownership of all work by University employees or students shall be allocated in accordance with the University Intellectual Property Policy. When using outside consultants/independent contractors to perform work for the University, whether under a sponsored program or otherwise, University employees must ensure there is a written agreement or adequate provisions in other agreements with the consultants/independent contractors to assign the rights to and in all works to the University.

2. Computer Software Copyrights

- a. Ownership. Ownership of computer software developed by faculty, staff, and student employees of the University shall be handled in accordance with the University Intellectual Property Policy.
- b. Funding by CURF or Other University Agent(s). If computer software is developed by faculty, staff, or student employees but funded by either the Clemson University Research Foundation (CURF) or another designated University agent(s) pursuant to a contract between the parties, then the University shall require the designated agent(s) to pay the Creator(s) the royalty payments that the Creators(s)

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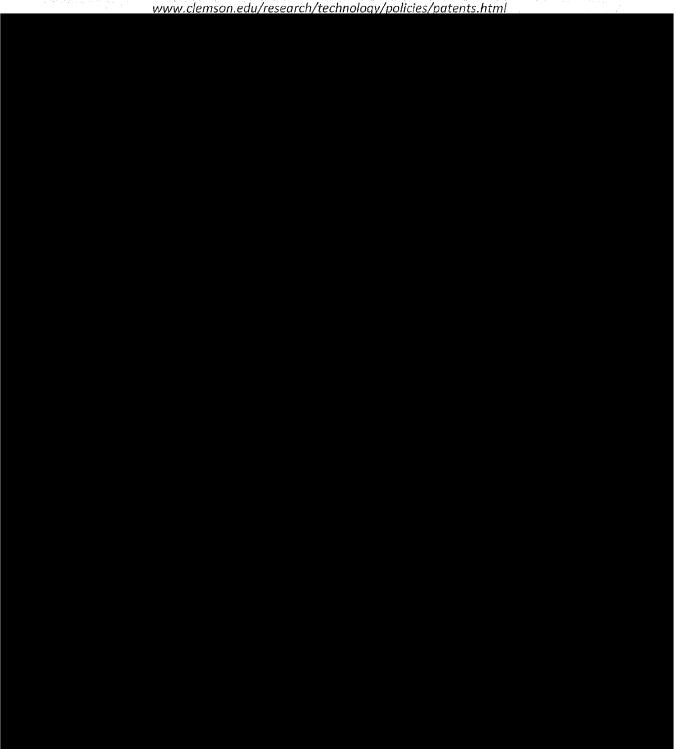
would have received after appropriate review and recommendation by the IPC if the computer software had been funded and developed by the University.

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Clemson University

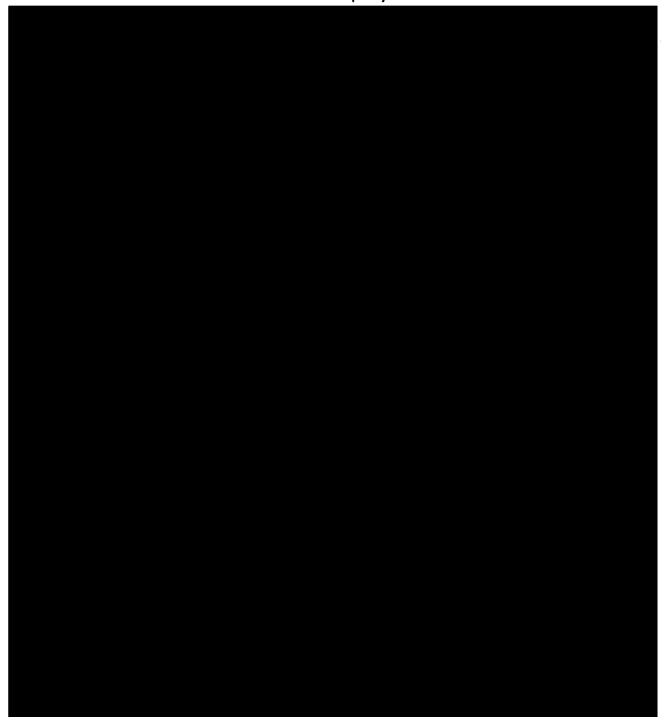
Confidential Intellectual Property Disclosure Form

In accordance with the Clemson University Intellectual Property Policy dated November 23, 2009



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14. Inventor(s) Information and Signature(s)

As indicated by your signature below, you acknowledge that you have reviewed and understand the Clemson University Intellectual Property Policy and understand that Clemson University may, in its sole discretion, administer, protect, license, or otherwise use or exploit this invention for the benefit of the University and the individual creators. By signing below, you certify that all information provided herein is true and accurate to the best of your knowledge. All individuals equally share in any revenue received from the commercialization of this invention, creation, or discovery unless otherwise indicated by the percent distributions below.

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