SUBMISSION FORM University System/Employee Intellectual Property Joint Participation MUSP 407

This form is to be submitted with any Board of Regents item whereby a campus seeks the approval of an agreement with or arrangement regarding an employee pursuant to 20-25-109 MCA and Regents Policy 407.

When the submission concerns matters of trade secrets or confidential business information, or any other matter entitled to privacy under state or federal law (e.g., the federal statute known as Bayh/Dole) the submitting campus may request consideration of the submission, in whole or in part, in executive session.

The submitting campus should also provide the Commissioner a copy of the contract(s) that form the basis for the cooperative arrangement for which approval is sought. Submission of the contract does not indicate a conclusion that all or part of the contract is a public document and the question of whether it is in whole or in part protected from public disclosure will be evaluated on a case by case basis.

1. Summarize the nature of the intellectual property that was developed by the employee seeking approval. Indicate the sources of funding for the research that resulted in this invention.

"Malware Resistant Obfuscated Computing Hardware for Reconfigurable Hardware Devices" - This technology is a computing architecture that detects and recovers from malware attacks. This is accomplished using redundant processors that run in parallel and execute the same software functionality, but each with different instruction code assignments from one another. A single program executable is downloaded to the computer where it is then replicated for each redundant processor. The instruction code assignments in each program are then scrambled and loaded into each processor's program memory. Finally, each processor has its instruction decode table updated with the newly scrambled instruction codes so that it can understand and execute its own program. The replication and instruction code re-assignment are handled on the device so an attacker never knows the final instruction codes. If an attacker is ever able to inject malware into the program memories of the computers through a standard input port, when the processors go to execute an instruction they will see the same instruction code across each computer. This is by design impossible and is flagged as an attack. The computers are then reset and new scrambled programs are created to override the malware, thus removing the attack.

a. Name(s) of the university employee(s) involved.

- Dr. Brock LaMeres
 - Lead Inventor of intellectual property
 - o Professor, Electrical and Computer Engineering, MSU

The MSU Office of Research Compliance has worked with Dr. LaMeres to develop a Conflict of Interest Management Plan. The purpose of the plan is to accurately describe the potential conflicts in writing, create explicit agreements to protect against actual conflicts, and to

facilitate oversight. A Plan Manager has been assigned to review the case annually and whenever major changes in circumstance occur.

b. Name(s) of business entity(ies) involved.

Resilient Computing, LLC Bozeman, MT 59718

- 2. The university and employee(s) are seeking approval for (check as many as appropriate):
 - **a.** \square The employee to be awarded equity interest in the business entity
 - **b.** The employee to serve as a member of the board of directors or other governing board of the business entity
 - \mathbf{c} . \square The employee to accept employment from the business entity
 - **d.** Other. Please explain.
- 3. Summarize the nature of the relationship between the university and the business entity (e.g., the entity is licensing the intellectual property from the university, the entity is coowning the intellectual property with the university).

Resilient Computing has licensed the intellectual property referenced above that is wholly owned by MSU. MSU's Technology Transfer Office executed a license agreement on October 31, 2023.

a. The proposed duration of the agreement or arrangement.

The duration of the license is 10 years from the date of execution.

b. The conditions under which the agreement may be terminated or dissolved.

MSU may terminate this Agreement as follows:

- a. if Licensee does not make a payment due hereunder and fails to cure such nonpayment within forty-five (45) days after the date of notice in writing of such nonpayment by MSU;
- b. if Licensee shall become insolvent, shall make an assignment for the benefit of creditors, or shall have a petition in bankruptcy filed for or against it (in such case, termination shall be effective immediately upon MSU giving written notice to Licensee);
- c. if an examination by MSU's accountant pursuant shows an underreporting or underpayment by Licensee in excess of twenty percent (20%) for any twelve (12) month period;
- d. if Licensee fails to satisfy the Performance Milestones as set forth elsewhere herein; or
- e. if Licensee breaches any material term of this Agreement.
- f. Additionally, MSU shall have the right to terminate this Agreement immediately, without the obligation to provide notice, if Licensee files a claim, including in any way

the assertion that any portion of the Patent Rights is invalid or unenforceable where the filing is by the Licensee, a third party on behalf of the Licensee, or a third party at the written urging of the Licensee.

4. Explain specifically how the University System or the State of Montana will likely benefit from the agreement or arrangement.

- **a.** The IP owned by MSU under the negotiated license provides MSU with annual maintenance and sublicensing fee income and royalties will generate revenue upon successful commercial development of the technologies.
- **b.** Technical advances in the field with public and private contribution provides both academic and economic development.
- **c.** Collaborative research opportunities for Montana State University and its students.

5. Summarize the financial terms of the agreement or arrangement. Include:

a. The value, nature and source of the University's contribution.

MSU will pay for patent costs and will be reimbursed by Resilient Computing per the upcoming license agreement. TTO will pursue patent prosecution and provide marketing services and personnel hours. MSU will own any patents and retains the right to use the technology and patents for academic research or other not-for-profit scholarly purposes.

b. The value and nature of the employee's contribution.

As an MSU inventor, Dr. LaMeres will assist in the preparation and completion of the patent filings.

c. The anticipated revenue to be generated by the project and the timeline for generating such revenue.

The license agreement will set performance milestones for sales of the licensed technology, as well as annually due sales and marketing reports. There is no way to determine anticipated revenue at this early stage.

d. The manner in which revenue and expenses will be shared by the parties.

Royalty revenues will be shared by MSU and the inventors after payment of a development fee to MSU and collection of any unreimbursed patent costs. All expense information will be detailed in the confidential agreement language.

e. The nature of each party's equity interest in the project. If none, so indicate.

Dr. LaMeres is the sole owner of Resilient Computing, LLC.