THE UNIVERSITY OF MICHIGAN
REGENTS COMMUNICATION

ACTION REQUEST

Subject: Technology Transfer Agreements with the University of Michigan

Action Requested: Approval of Technology Transfer Agreements

Preamble:

Statutory conflicts of interest situations were identified by the Office of Technology Transfer (“OTT”) while reviewing technology transfer agreements that then triggered a review by the Medical School Conflict of Interest Board and/or the UMOR Conflict of Interest Review Committee. Plans for management of the possible risks associated with the conflicts of interest will be developed and approved by the Board and/or Committee and may require agreement by the parties involved.

These proposed technology transfer agreements (“Agreements”) fall under the State of Michigan Conflict of Interest Statute because employees of the University of Michigan (“University”) have outside activities, relationships, or interests in the companies described in Attachment A. The law permits such Agreements provided they are disclosed to the Board of Regents (“Regents”) of the University and approved in advance by a 2/3 vote.

Background:

These companies were formed to commercialize University technologies and desire to option, license, or reassign the University’s rights associated with them. OTT selected these companies as University partners and negotiated the terms of the proposed agreements in accordance with University policy and its accepted licensing principles.

Agreement Terms Include:

The University will retain ownership of the optioned, licensed, or reassigned technologies and may continue to further develop and use them internally. No use of University services or facilities, nor any assignment of University employees, is obligated or contemplated under the Agreements. Standard disclaimers of warranties and indemnification apply, and the Agreements may be amended by consent of the parties, such as adding related technology. University procedures for approval of these changes will be followed and additional conflict of interest review will be done as appropriate. Terms specific to each Agreement are described in Attachment A.
Net Effect:

OTT has negotiated and finalized the terms of the option, license, or reassignment agreements for patents, technology, or content related to University OTT files for particular fields of use. The companies will obtain the right to evaluate, use, and/or commercialize the University technologies. The net effects specific to each Agreement are described in Attachment A.

Recommendations:

These matters have been reviewed and approved by the Medical School Conflict of Interest Board and/or the UMOR Conflict of Interest Review Committee. In light of this disclosure and our finding that the Agreements were negotiated in conformance with standard University practices, I recommend that the Board of Regents approve the Agreements between the University and the companies outlined in Attachment A.

Respectfully submitted,

Rebecca Cunningham
Vice President for Research

September 2021
License Agreement between the University and Adaptable Powerful Transformative Solar Solutions LLC
Reviewed by the UMOR Conflict of Interest Review Committee

Office of Technology Transfer Intellectual Property File Information

<table>
<thead>
<tr>
<th>Number</th>
<th>Title</th>
<th>Inventors</th>
</tr>
</thead>
<tbody>
<tr>
<td>7439</td>
<td>Enclosed Wave/Particle Energy Converter Device and Method of Use Thereof</td>
<td>Mojtaba Akhavan-Tafti</td>
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<tr>
<td>2019-402</td>
<td>Methods for Power Delivery</td>
<td>Mojtaba Akhavan-Tafti</td>
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<tr>
<td>2020-031</td>
<td>Enclosed Electromagnetic Converter</td>
<td>Mojtaba Akhavan-Tafti</td>
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<tr>
<td>2020-432</td>
<td>Photovoltaic Light Source and Battery Charger</td>
<td>Mojtaba Akhavan-Tafti</td>
</tr>
<tr>
<td>2021-256</td>
<td>A Modular, Photovoltaic Pole System</td>
<td>Mojtaba Akhavan-Tafti</td>
</tr>
</tbody>
</table>

Background
Adaptable Powerful Transformative Solar Solutions LLC (doing business as “APT Solar Solutions”) was formed to commercialize 3D solar technology and desires to license the University’s rights associated with the technology listed above.

Net Effects
- Worldwide exclusive
- Patents
- All fields of use
- Right to commercialize

Agreement Terms
APT Solar Solutions will:
- Obtain the right to grant sublicenses
- Pay a royalty on sales
- Reimburse patent costs

The University will:
- Receive equity in APT Solar Solutions
- Retain the right to purchase more equity in APT Solar Solutions

University Employee; University Title; Relationship with APT Solar Solutions
- Mojtaba Akhaven-Tafti; Assistant Research Scientist, Climate and Space Sciences and Engineering; Partial Owner
### License Agreement between the University and Arbor Batteries, Inc.

Reviewed by the UMOR Conflict of Interest Review Committee

<table>
<thead>
<tr>
<th>Number</th>
<th>Title</th>
<th>Inventors</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019-454</td>
<td>Composite Anodes for Li-ion Batteries with High Capacity and Fast Charging Capability</td>
<td>Neil Dasgupta, Jeff Sakamoto, Kuan-Hung Chen, Min Ji Namkoong</td>
</tr>
</tbody>
</table>

### Background

Arbor Batteries, Inc. was formed to commercialize 3-D Composite Anodes for Li-ion Battery technology and desires to license the University’s rights associated with the technology listed above.

### Net Effects
- Worldwide exclusive
- Patents
- All fields of use
- Right to commercialize

### Agreement Terms

Arbor Batteries, Inc. will:
- Obtain the right to grant sublicenses
- Pay an upfront fee
- Pay a royalty on sales
- Reimburse patent costs

The University will:
- Receive equity in Arbor Batteries, Inc.
- Retain the right to purchase more equity in Arbor Batteries, Inc.

### University Employee; University Title; Relationship with Arbor Batteries, Inc.
- Neil Dasgupta; Associate Professor, Mechanical Engineering; Partial Owner
- Jeff Sakamoto; Associate Professor, Mechanical Engineering; Partial Owner
Agreement #3
License Agreement between the University and Arbor Simulation, LLC
Reviewed by the Medical School Conflict of Interest Board

<table>
<thead>
<tr>
<th>Number</th>
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<th>Inventors</th>
</tr>
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<tbody>
<tr>
<td>7302</td>
<td>Michigan Hip Model</td>
<td>Deborah Rooney, Clifford Craig, Patricia Dine, Scott Laorr, Kevin LaForest</td>
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</table>

**Background**
Arbor Simulation, LLC was formed to commercialize clinical simulators for educating medical providers on the proper diagnosis, procedure, and/or treatment of specific medical conditions and desires to license the University’s rights associated with the technology listed above.

**Net Effects**
- Worldwide exclusive
- Device design and know-how
- All fields of use
- Right to commercialize

**Agreement Terms**
Arbor Simulation, LLC will:
- Pay a royalty on sales

**University Employee; University Title; Relationship with Arbor Simulation, LLC**
- Dylan Rushton; ENGR/ELEC Tech II, Learning Health Sciences; Partial Owner
- Deborah Rooney; Associate Professor, Learning Health Sciences; Partial Owner
License Agreement between the University and REFBOT, LLC
Reviewed by the UMOR Conflict of Interest Review Committee

<table>
<thead>
<tr>
<th>Number</th>
<th>Title</th>
<th>Inventors</th>
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<tbody>
<tr>
<td>7429</td>
<td>Automated Software Refactoring Technology</td>
<td>Marouane Kessentini</td>
</tr>
<tr>
<td>2020-145</td>
<td>Interactive Refactoring Bot</td>
<td>Marouane Kessentini, Vahid Alizadeh</td>
</tr>
<tr>
<td>2020-147</td>
<td>Automated Refactoring Documentation and Code Reviews Bot</td>
<td>Marouane Kessentini, Vahid Alizadeh, Soumaya Rebai</td>
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</table>

**Background**

REFBOT, LLC was formed to develop AI-based products to overcome a critical hurdle in complex software development and maintenance and the lack of automated and scalable tools to deal with the growing problem of technical debt (cost of quality and security challenges) in the software industry, and desires to license the University’s rights associated with the technology listed above.

**Net Effects**

- Worldwide exclusive for 2020-145, 2020-147
- Non-exclusive for 7429
- Copyrights
- All fields of use
- Right to commercialize

**Agreement Terms**

REFBOT, LLC will:

- Obtain the right to grant sublicenses
- Pay a royalty on sales

The University will:

- Have the right to acquire equity in REFBOT, LLC
- Retain the right to purchase more equity in REFBOT, LLC

**University Employee; University Title; Relationship with REFBOT, LLC**

- Marouane Kessentini; Associate Professor, Computer and Information Science, UM-Dearborn; Partial Owner
Agreement #5

License Agreement between the University and Taza Aya LLC
Reviewed by the UMOR Conflict of Interest Review Committee

Office of Technology Transfer Intellectual Property File Information

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<thead>
<tr>
<th>Number</th>
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<th>Inventors</th>
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</thead>
<tbody>
<tr>
<td>2019-448</td>
<td>Compound Annular Non-Thermal Plasma Reactor Core</td>
<td>Herek Clack, Kevin Melotti</td>
</tr>
<tr>
<td>2020-521</td>
<td>Jet Air Curtain for Personal Respiratory Protection</td>
<td>Herek Clack</td>
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</table>

Background

Taza Aya LLC was formed to commercialize technology capable of destroying airborne chemical contaminants and biological agents and desires to license the University’s rights associated with the technology listed above.

Net Effects

- Worldwide exclusive
- Patents
- All fields of use
- Right to commercialize

Agreement Terms

Taza Aya LLC will:
- Obtain the right to grant sublicenses
- Pay a royalty on sales
- Reimburse patent costs

The University will:
- Receive equity in Taza Aya LLC
- Retain the right to purchase more equity in Taza Aya LLC

University Employee; University Title; Relationship with Taza Aya LLC

- Herek Clack; Associate Professor, Civil and Environmental Engineering; Partial Owner
- Michael Drake; Senior Executive Director, Office of Advancement, College of Engineering; Partial Owner