Greenon InvenTeam® Issued US Patent

With support from the Lemelson-MIT Program and Microsoft’s MakeWhatsNext Patent Program, the Greenon InvenTeam received a patent issued by the United States Patent and Trademark Office on January 25.

Greenon students and educators on the school’s 2019-2020 Lemelson-MIT InvenTeam® are now inventors on a U.S. Patent after the patent application for their invention of a net system to reduce man-made debris in local waterways was granted by the United States Patent and Trademark Office.

“From start to finish, the work of the students and teachers on the Greenon InvenTeam has highlighted the impact of what can happen when students are engaged and excited about their learning,” said Superintendent Darrin Knapke. “As teenagers, these Greenon Knights are already inventors on a patent, and that’s just the start of incredible things to come for these students.”

The Greenon InvenTeam includes Braelynn Cameron, Kacie Sizer, Makenzie Gossett, Emma Bennett, Alex Tighe, Lacy Herdman, Kylie Mader, Rhia Thomas, Masonn Hayslip, Tyler Jenkins, Madison North, Lily Hopkins, Alexa Cunningham, and Arizona Henderson. They are led by Greenon teachers Kyle Bandy, Tina Harris, Tom Jenkins, Jim Shaner, and Jennifer Tropp.

The Greenon InvenTeam’s system for collecting debris was developed with year-long coaching and mentoring that also included a grant from the Lemelson-MIT Program (LMIT). Following the successful prototype of the net system, LMIT staff connected the Greenon team with Microsoft’s MakeWhatsNext Patent Program, which offers female inventors and their teams pro bono legal support to patent their inventions through a team of volunteer attorneys, paralegals, and engineers at Microsoft.

With the help of Microsoft’s MakeWhatsNext Patent Program, the U.S. Patent Office issued US Patent 11,230,836 on January 25, 2022, to the team of 14 student inventors, including 12 female students, and five educators.

The Greenon team included a number of female students who are interested in pursuing STEM careers, and several of these students are now attending college and majoring in environmental science, pre-medicine, and other in-demand fields.

“Being named on a patent is a significant achievement for these young inventors and I am glad our program contributed to making this possible,” said Tom Wong, Microsoft Patent Attorney and volunteer of the MakeWhatsNext Patent Program who drafted the patent application for the Greenon InvenTeam. “It is also gratifying to see that several of these young
women inventors decided to pursue a college degree in a STEM field after graduating from high school."

“Having an opportunity in high school to participate in the Lemelson-MIT InvenTeam program is a once-in-a-lifetime opportunity itself,” said Mr. Jenkins. “Being able to go beyond that to learn about the patent process, work with local and global partners in the development of the product, and now receive a U.S. patent is an experience that enriched the education of not just our team, but all the students, staff, and community members at Greenon who have supported us on this journey. We are grateful to the Lemelson-MIT Program and Microsoft for believing in the power of what students can accomplish and providing support and resources to let them do amazing things.”

Local governmental agencies, Hays Fabricating, The Abilities Connection, and Enon-based company SeepeX Inc. provided support and guidance for the team throughout the development of the prototype.

About the Greenon Lemelson-MIT InvenTeam project

With a $9,200 grant from the Lemelson-MIT InvenTeam initiative, the team explored options to safely reduce the amount of man-made debris that exists within the Mad River and its tributaries.

They developed a net system that can be used to cover the end of the drain pipes that dump storm drain water (along with other items) directly into our local waterways. The team developed an animal-friendly prototype that would allow for the free flow of water while catching and retaining debris.

Various materials, forms of net construction, as well as anchoring systems were explored to create a durable net system that would function as intended by the design team. Additionally, the team developed a battery-powered device that could measure the amount of tension, then remotely alert the team once the net was full.

About Greenon Schools

The Greenon Local School District is a public school district in Clark County, Ohio, serving students from Enon, Mad River Township, and Green Township. Approximately 1,580 students in kindergarten through 12th grade attend Greenon Schools, which is known for its STEM opportunities and FFA program. Through community support in the approval of a $38 million bond issue, the district opened in the Fall of 2021 a new Greenon Schools K-12 Campus, located in the Village of Enon.

About The Lemelson-MIT Program

The Lemelson-MIT Program (LMIT) is a national leader in efforts to prepare the next generation of inventors and entrepreneurs. Our work focuses on the expansion of opportunities for people to learn ways inventors find and solve problems that matter to improve lives. Our commitment to diversity, equity and inclusion aims to remedy historic inequities among those who develop inventions, protect their intellectual property and commercialize their creations.

Jerome H. Lemelson, one of U.S. history’s most prolific inventors, and his wife Dorothy founded the Lemelson-MIT Program at the Massachusetts Institute of Technology in 1994. It is funded by The Lemelson Foundation and administered by the School of Engineering at MIT, an institution with a strong ongoing commitment to creating meaningful opportunities for K-14 STEM education.