

STATEMENT OF CONSIDERATIONS

REQUEST FOR ADVANCE WAIVER OF PATENT RIGHTS BY MONTEFIBRE HISPANIA, S.A. "MONTEFIBRE" UNDER DOE AWARD NO. DE-EE0006926; W(A) 2018-010

MONTEFIBRE has requested a waiver of patent rights of the United States of America for all subject inventions arising from its participation under the above referenced award. The award is for the Institute for Advanced Composites Manufacturing Innovation (IACMI). Collaborative Composite Solutions Corporation (CCS), a not-for-profit organization established by the University of Tennessee Research Foundation, is the prime recipient under the award funded by DOE's Advanced Manufacturing Office (AMO). MONTEFIBRE is a member of IACMI.

IACMI is one of the Institutes of the Manufacturing USA initiative. Like the other Institutes, it is a consortium of industry and universities focused around a specific technology. IACMI's focus is advancing the composite industry in the U.S. MONTEFIBRE's participation is in precursors used to make carbon fiber.

The relative high cost of carbon fiber has limited its use in automobiles and other high-volume industrial applications. A significant portion of the cost is tied to the expensive polyacrylonitrile (PAN) precursor and the energy-intensive process for converting the PAN precursor into pure carbon fiber. Oak Ridge National Laboratory (ORNL) has developed technology for using commercially available, textile-grade acrylic fiber – the same material mass produced for use in clothing and carpets – which costs significantly less than PAN precursor fibers. But there are no acrylic fiber mills in the U.S. Therefore, the acrylic fiber precursors must be foreign sourced.

MONTEFIBRE manufactures acrylic fibers from its facility in Spain. The facility is the largest textile acrylic fiber and conventional precursor plant in Europe. It has an annual production capacity of 100,000 tons. The facility was built in 1972 and completely renovated in 2005. MONTEFIBRE and the facility trace its history in the development of acrylic fiber technology to 1941. The facility was purchased in mothballed condition in 2015 and tens of millions of dollars were invested in it to restore it to full production capability. Additional investments are ongoing to prepare for the production of carbon fiber precursor.


MONTEFIBRE will participate in multiple R&D projects in partnership with IACMI and other IACMI members. The MONTEFIBRE work scope in each project will include comprehensive participation in all phases of planning, execution and evaluation, including producing trial quantities of textile acrylic precursor and working cooperatively with the Carbon Fiber Technology Facility at ORNL to develop carbonization protocols to enable examination of variants in low cost carbon fiber (LCCF) such as tow linear density, filament cross-section, and mechanical properties; participation in evaluation of process trials and input to techno-economic models. As part of its commercialization efforts of the ORNL technology, MONTEFIBRE will build a carbonization facility in the U.S. The expected cost for the U.S. carbonization facility is approximately \$180 million.

The IACMI award is for five years. The total anticipated federal funding from AMO is approximately \$70 million. The federal funds will be leveraged against state and industry cost share. IACMI funds on projects refer to the combination of state and federal funds that IACMI will commit to a project. For every dollar of IACMI funds that are provided to a project, the minimum matching cost share for industry is one dollar resulting in a one for one commitment to the project between industry and IACMI funds. MONTEFIBRE will join other project members participating in providing the required cost share to each project. MONTEFIBRE will not receive any federal funds under the award.

MONTEFIBRE has agreed that this waiver shall be subject to the march-in and preference for U.S. industry provisions, as well as the U.S. Government license, comparable to those set out in 35 U.S.C. 202-204. Further, MONTEFIBRE has agreed to the attached U.S. Competitiveness provision, paragraph (t). In brief, MONTEFIBRE has agreed that products embodying a waived invention or produced through the use of a waived invention will be manufactured substantially in the United States unless MONTEFIBRE can show to the satisfaction of the DOE that it is not commercially feasible to do so.

Referring to item 10 of the waiver petition, granting this waiver is not expected to have an adverse impact on competition. According to the petition, the project growth in the use of carbon fiber cannot be supported by the existing carbon fiber industry. Innovation, cost reduction and additional suppliers are required. The intellectual property created through IACMI should spur competition and facilitate new product offerings but will not negate the dominance of the incumbent producers.

Considering the foregoing, it is believed that awarding this waiver will provide MONTEFIBRE with the necessary incentive to invest its resources in commercializing the results of the award in a manner that will make the above technology available to the public in the shortest time. Therefore, upon evaluation of the waiver petition and in view of the objectives and considerations set forth in 10 CFR 784, all of which have been considered, it is recommended that the requested waiver be granted.


Glen Drysdale
Patent Attorney
Golden Field Office

Date: 11/29/18

Based upon the foregoing Statement of Considerations and representations in the attached waiver petition, it is determined that the interests of the United States and the general public will be best served by a waiver of patent rights of the scope determined above, and therefore the waiver is granted. This waiver shall not apply to any modification or extension of the award, where through such modification or extension, the purpose, scope, or cost of the award has been substantially altered.

CONCURRENCE:



Dr. Robert Ivester
Director
Advanced Manufacturing Office

Date: _____

APPROVAL:



Brian Lally
Assistant General Counsel for Technology
Transfer and Intellectual Property

Date: 12/6/18