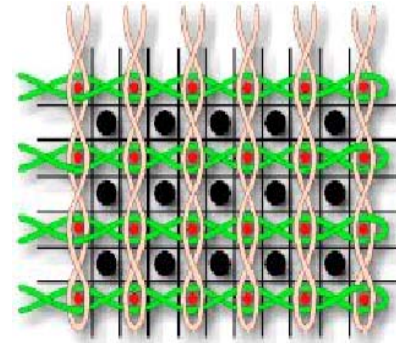


The Opportunity

Researchers at the National Institute of Advanced Industrial Science and Technology (AIST) have developed and patented several methods for treating various textiles, fabrics, and fibrous composites in order to provide unique properties and potential applications.



Intellectual Property

Patents protecting the intellectual property are described as follows:

Patent	Features & Applications	Inventors
6,187,391	<ul style="list-style-type: none"> Surface modification of a textile fabric or nonwoven to provide one surface with hydrophobic properties and the other surface with hydrophilic properties. Excellent for sports equipment, athletic & recreational wear, and workplace clothing. 	Kataoka & Yoshikawa
5,858,152	<ul style="list-style-type: none"> Rotating, fiber separating and throwing roller combines reinforcing fibers and thermoplastic resin fibers to form a composite mat. Strong, yet light-weight, void-filled foam composite material produced upon heating. 	Nagatsuka & Kitano
5,537,718	<ul style="list-style-type: none"> Non-uniform density matrix of thermoplastic resin fibers and reinforcing fibers. Thermoplastic: polyamide (Nylon), polypropylene, polyethylene, or polyethylene terephthalate fibers; reinforcing fibers are glass, carbon, or aramid. In an example, carbon fibers are woven to successively decrease in the direction of thickness, which imparts unique bending strength or variable thermal conductivity properties vs. uniformly mixed composites. 	Nagatsuka & Kitano
4,984,340	<ul style="list-style-type: none"> Unique approach to joining cloth without thread using high-pressure jet of fluid to intertwine and weave fibers together. Jet streams are directed from opposite sides to the same point of contact. Retractable shielding plate enables safe and instantaneous stop & start. 	Nagatsuka & Fukuta
5,242,768	<ul style="list-style-type: none"> Three-dimensional woven fabric with component fibers interlaced in the X, Y, and Z directions and to be used for a battery. 	Nagatsuka, Kitano & Aoki

Organizational Capabilities

AIST (National Institute of Advanced Industrial Science and Technology) is Japan's extensive public research organization established in 2001.

Comprised of more than 50 autonomous research units in various innovative research fields and employs about 2500 research scientists and well over 3000 visiting scientists.

AIST Home Page:

www.aist.go.jp/aist_e/about_aist/index.html.

For More Information

AIST is seeking qualified licensees for these technologies *and will provide assistance with commercialization.* Consideration and will be provided to a range of financial, strategic, and commercial investment options. Certain circumstances will warrant consideration for nominal funding from AIST.

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