

Request for Information

The examiner has requested additional information on the following subjects:

- **Product information about applicant's goods**

Applicant, Modern Meadow, is growing in a laboratory a leather substitute material that is not leather but is very much like leather in its appearance and its physical properties. The material, called "bioleather" or "biofabricated material," can be used to make all kinds of typical leather goods, but these goods will be made with bioleather which is a biofabricated material grown in a laboratory from collagen, which is used either by itself or combined with other materials to make all types of products that typically might be made with leather, but instead will be made with bioleather or biofabricated material. Applicant's bioleather or biofabricated material is a new leather-like material that is designed to be a sustainable alternative to animal leather because livestock are not used to create bioleather. Rather bioleather is bioengineered and grown using collagen which is the fundamental material that composes leather.

Three articles about Modern Meadow and the biofabricated leather-like material it is growing in a laboratory can be found in Fast Company, CNBC and the Atlantic at the URLs below and attached (as MM_Articles):

Fast Company: <https://www.fastcompany.com/40475098/how-modern-meadow-is-fabricating-the-animal-free-leather-of-the-future>

CNBC: <https://www.cnbc.com/2018/03/09/modern-meadow-and-evonik-are-brewing-leather-in-a-lab.html>

The Atlantic: <https://www.theatlantic.com/science/archive/2017/09/modern-meadow-lab-grown-leather/540285/>

This bioleather or biofabricated material is intended to be used, either by itself or as a composite with other materials, to manufacture and/or as a component of all of the goods identified in Applicant's application.

- **Fact sheets, instruction manuals, advertising, marketing and promotional materials**

Applicant is enclosing with this response a FAQ entitled *FAQ Zoa™ Bioleather Materials*, which provides additional information about the biofabricated materials being grown by Applicant.

- **Photographs of the goods and prototypes of the goods**

Products made from ZOA brand biofabricated materials are under development and have not yet reached commercial production. We are submitting with this response, a PowerPoint presentation which includes photographs showing the bioleather or biofabricated material – i.e., the leather substitute – which is being and will be used to make products made from this material. All seven slides show materials made with this bioleather or biofabricated material. Some of the slides – for example the round depictions – simply show the bioleather or biofabricated material at various levels of

magnification. Other of the slides show bioleather or biofabricated material incorporated into or on to fabrics. All of the materials may be useful in various products, such as apparel, footwear, furniture, watch straps, handbags, and virtually any other product that historically has been made of leather, but now will be made using bioleather.

- **Evidence of other companies, if any, providing the same goods**

Applicant is not aware of other companies that are providing the same goods other than to say that companies that provide leather goods are providing the same type of goods that applicant will be providing, just that applicant's goods will be made with bioleather material which is biofabricated material made of collagen.

At least two other companies are bio-engineering a leather-like substance in different ways. Ecovative uses mycelium from mushrooms to biofabricate a leather-like substitute material. Ecovative's web site can be found at: <https://ecovatedesign.com/>

Bolt Threads also uses mycelium to biofabricate a leather-like substitute material. Bolt Threads' web site can be found at: <https://boltthreads.com/>

A company called Geltor, supposedly has bioengineered a book cover using jellyfish gelatin.

In addition to these companies, a company called Amsilk uses spider silk to generate silk proteins which it then spins into fibers. Amsilk's web site can be found at the URL: <https://www.amsilk.com/home/>

- **A description of the nature and purpose of the goods and the channels of trade for the goods**

Bioleather can and will be used to make all kinds of products including all of the products identified in applicant's application, and will be sold at the wholesale level to manufacturers and product designers for use in the manufacture of various types of consumer products, and at the retail level to consumers purchasing consumer goods made from bioleather. Again, those goods will be all of the goods identified in Applicant's application. Because bioleather is a leather substitute material, it can be used to make any product that historically has been made from animal leather.