

Modification of Lignin and Fibers Made Thereby

Disclosure Number

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Technology Summary

The present invention comprises a new method for lignin-based fiber processing, and fibers made thereby. Desired lignin material from a specific supplier can be applied with a universal treatment to economically obtain a low-cost formulation that can be processed into fiber and these fibers can then be dimensionally stabilized without inter-filament fusion. These fibers can then be carbonized to obtain carbon fibers. The method was found to be applicable for all lignins known in the art (hardwood, softwood, grass, and other derivatized lignins). However, depending on the source of lignin the formulation or the composition can be modified without altering the chemistry. This makes our approach lignin source-neutral.

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