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(57) Abstract:

The present invention introduces an innovative composite material tailored for the construction and automotive sectors. Comprising natural fibers, specifically sourced from plants like flax, hemp, jute, and kenaf, this material is bound within a resin matrix, ensuring optimized tensile strength, durability, and longevity. The fibers undergo specialized treatments to mitigate traditional limitations, such as moisture absorption. Notably, this invention presents a sustainable and eco-friendly alternative to conventional synthetic materials, offering potential weight reductions in automotive applications and superior insulation in construction, while also promising enhanced biodegradability at the end of its lifecycle. Accompanied Drawing [FIGS. 1-2]

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