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(54) Title (EN): FIBER-BOUND ENGINEERED MATERIALS FORMED USING FOUNDATION SCRIMS

(54) Title (FR): MATÉRIAUX MODIFIÉS LIÉS À DES FIBRES FORMÉS À L'AIDE DE CANEVAS DE FONDATION

(57) Abstract:

(EN): A fiber bound engineered material is provided that imparts an intended characteristic at an intended relative location. A fiber layer is entangled with additional fibers in a manner to create a non-uniform engineered material. The lack of uniformity of a fiber bound engineered material may be accomplished through manipulation of the fibers and/or through fiber binding a scrim. The fiber layer binds with additional fibers through entanglement such that a mechanical connection between the entangled fibers is provided. This entanglement allows the fibers to bind without supplemental adhesives, interlacing, or connections. Variations in the fibers and/or inclusion of scrim materials prior to entanglement allows for an intended characteristic (e.g., a functional characteristic) at an intended relative location (e.g., a position determined by an article to be formed therefrom).

(FR): La présente invention concerne un matériau modifié lié à des fibres, qui confère une caractéristique souhaitée au niveau d'un emplacement relatif souhaité. Une couche de fibres est enchevêtrée avec des fibres supplémentaires de manière à créer un matériau modifié non uniforme. Le manque d'uniformité d'un matériau modifié lié à des fibres peut être obtenu par une manipulation des fibres et/ou par liaison de fibres à un canevas. La couche de fibres se lie à des fibres supplémentaires par enchevêtrement de telle sorte qu'une liaison mécanique entre les fibres enchevêtrées est obtenue. Cet enchevêtrement permet aux fibres de se lier sans adhésif, entrelacement ou interaction supplémentaire. Les variations dans les fibres et/ou l'inclusion de matériaux de canevas

avant l'enchevêtrement tiennent compte d'une caractéristique voulue (par ex., une caractéristique fonctionnelle) au niveau d'un emplacement relatif souhaité (par ex., une position déterminée par un article à former à partir de celle-ci).

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