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(54) APPARATUS AND METHOD FOR THE PREPARATION OF A THREE-DIMENSIONAL BIODEGRADABLE FIBRE NETWORK PRODUCT OF NATURAL ORGANIC FIBRES

(57) The invention relates to an apparatus and a method for the preparation of three-dimensional biodegradable fibre network product, wherein the apparatus performs the method comprising foaming natural organic fibres in aqueous solution, mould filling with the foamed natural organic fibres, wherein the mould has a plurality of pores, forming a three-dimensional biodegradable fibre network product by providing electromagnetic energy to the foamed natural organic fibres to control a pressure build-up internally within the mould, wherein the plurality of pores is adapted to evacuate liquid and steam generated by providing electromagnetic energy to the foamed natural organic fibres.

The invention also relates to a three-dimensional biodegradable fibre network product prepared by the inventive method and use of said product as a plant growth substrate, filtration medium, filling and/or acoustic and mechanical damping structure.

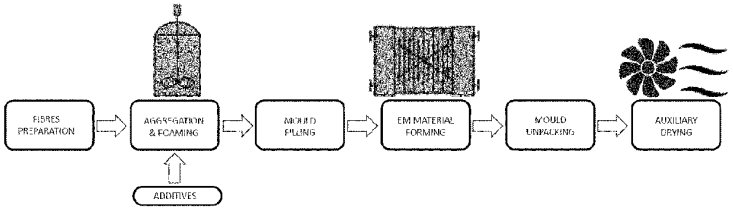

Fig. 1

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EUROPEAN SEARCH REPORT

Application Number
EP 24 18 7389

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D21J

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
Munich	12 March 2025	Pregetter, Mario

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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