

Title (en)
PLANT MOLDING PROCESS AND EQUIPMENT

Title (de)
ANLAGENFORMVERFAHREN UND VORRICHTUNG DAMIT

Title (fr)
PROCÉDÉ ET ÉQUIPEMENT DE MOULAGE DE PLANTES

Publication
EP 3702530 A4 20201223 (EN)

Application
EP 17870641 A 20171124

Priority

- CN 201721383659 U 20171024
- CN 201711116471 A 20171113
- CN 2017112960 W 20171124

Abstract (en)
[origin: EP3702530A1] The present invention relates to a plant molding process and device which the process includes: forming a pulp enveloping layer of molding products by dewatering paper serous fluid; forming a plant pulp layer of molding products by dewatering plant serous fluid; laminating the pulp enveloping layer and the plant pulp layer and processing non-fibrous material of the plant pulp layer to make it migrate toward the pulp envelope layer thereby combining them together. The plant molding device includes a vessel for containing slurry, a mold unit connected to the vessel by a transmission line and realized product transmission by a guiding device. This process can use different components of plants to help shape and improve strength, and to achieve 99% plant material utilization rate, energy conservation and environmental protection. The device is of intelligent operation, low manual intervention, low cost, high production efficiency and product yield.

IPC 8 full level
D21J 3/00 (2006.01); **D21J 5/00** (2006.01); **D21J 7/00** (2006.01)

CPC (source: CN EP US)
D21J 3/00 (2013.01 - CN EP US); **D21J 7/00** (2013.01 - EP)

Citation (search report)

- [Y] EP 1235462 A1 20020828 - MITSUBISHI ELECTRIC CORP [JP], et al
- [Y] US 6086720 A 20000711 - BODARY JOSEPH A [US], et al
- [A] WO 2017165986 A1 20171005 - DELUXE ENV TECH (SHANGHAI) CO LTD [CN]
- [A] WO 2017149408 A1 20170908 - STORA ENSO OYJ [FI]
- See references of WO 2019080242A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 3702530 A1 20200902; EP 3702530 A4 20201223; EP 3702530 B1 20230503; CN 107881856 A 20180406; CN 207468990 U 20180608; ES 2949423 T3 20230928; JP 2019536914 A 20191219; JP 6668471 B2 20200318; US 2020332473 A1 20201022; WO 2019080242 A1 20190502

DOCDB simple family (application)
EP 17870641 A 20171124; CN 201711116471 A 20171113; CN 2017112960 W 20171124; CN 201721509809 U 20171113; ES 17870641 T 20171124; JP 2018524205 A 20171124; US 201715775010 A 20171124