

Title (en)  
MACHINE FOR WINDING FABRICS MADE OF COMPOSITE MATERIALS ON A MANDREL

Title (de)  
MASCHINE ZUM WICKELN VON COMPOSITMATERIAL AUF EINEN KERN

Title (fr)  
MACHINE POUR ENROULER DU MATERIAU COMPOSITE SUR UN NOYAU

Publication  
**EP 3770091 B1 20220608 (EN)**

Application  
**EP 20186643 A 20200720**

Priority  
IT 201900012891 A 20190725

Abstract (en)  
[origin: EP3770091A1] Machine for winding preimpregnated fabrics, made of composite material, on a mandrel, where said machine comprises:- a flat supporting surface for a fabric (6);- a forming mandrel (5), with a rotation axis (A5);- a pair of peripheral rollers (2, 3), with respective rotation axes (A2, A3), under the rotation axis (A5) of the mandrel (5);- at least one peripheral roller (4), with a rotation axis (A4), above the rotation axis (A5) of the mandrel (5);- a pair of arms (8), for supporting and moving the peripheral roller (4), comprising constraint means for said peripheral roller (4) adapted to allow a free or braked movement thereof;- a structural frame (7), for supporting the mandrel (5), the peripheral rollers (2, 3) and the arms (8) of the peripheral roller (4);- first electric motor means (15) and second motor means (16), for the independent and selective command of the rotation respectively of the mandrel (5) and of the peripheral rollers (2, 3);where said first and second electric motor means (15, 16) cause the free, motor-driven or braked rotation respectively of the mandrel (5) and the peripheral rollers (2, 3), and where the arms (8) place the peripheral roller (4) in contact with the mandrel (5), so as to create between the peripheral rollers (2, 3, 4) and the mandrel (5) corresponding areas of rolling or sliding friction (F2, F3, F4) adapted to determine on the preimpregnated fabric (6) a mechanical tension capable of promoting its winding and compaction on the mandrel (5).

IPC 8 full level  
**B65H 18/20** (2006.01); **B65H 29/00** (2006.01)

CPC (source: EP)  
**B65H 18/20** (2013.01); **B65H 29/008** (2013.01); **B65H 2301/41468** (2013.01); **B65H 2301/5143** (2013.01); **B65H 2404/1372** (2013.01); **B65H 2404/43** (2013.01)

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

DOCDB simple family (publication)  
**EP 3770091 A1 20210127**; **EP 3770091 B1 20220608**; IT 201900012891 A1 20210125

DOCDB simple family (application)  
**EP 20186643 A 20200720**; IT 201900012891 A 20190725