

Title (en)  
A METHOD FOR REINFORCEMENT OF A COMPOSITE PRODUCT

Title (de)  
VERFAHREN ZUR VERSTÄRKUNG EINES VERBUNDPRODUKTES

Title (fr)  
PROCÉDÉ DE RENFORCEMENT D'UN PRODUIT COMPOSITE

Publication  
**EP 3758904 A4 20211201 (EN)**

Application  
**EP 19760693 A 20190222**

Priority  
• FI 20185184 A 20180227  
• FI 2019050143 W 20190222

Abstract (en)  
[origin: WO2019166691A1] The object of the invention is a method to reinforce a composite product in which method a combination consisting at least a mold (1) and against it put composite product (2) is immersed into a liquid (11) in a vessel (10), the immersion depth (d) of the mentioned combination from the surface (11.1) of the liquid (11) is selected so that a desired hydrostatic pressure is achieved to the surface (2.1) of the composite product, which pressure is kept constant for a certain time or which pressure is varied during the immersion by changing the immersion depth (d) and the mentioned combination is kept immersed in the liquid (11) for a certain favorable time in order to reinforce the composite product (2). In another application of the invention, the mentioned combination is surrounded by a gas tight membrane (3) before the immersion and inside the membrane there will be led the vacuum channel (8) through the membrane, that channel is connected to the vacuum unit (15), inside the membrane 3 a vacuum is created with the vacuum unit (15) and via the vacuum channel (8) and the composite product (2) surrounded by the membrane (3) is kept under the effect of the vacuum the duration of the immersion of the composite product or a part of this time in order to reinforce the composite product.

IPC 8 full level  
**B29C 35/02** (2006.01); **B29C 35/04** (2006.01); **B29C 35/16** (2006.01); **B29C 37/00** (2006.01); **B29C 43/52** (2006.01); **B29C 70/34** (2006.01); **B29C 70/44** (2006.01); **B29C 43/56** (2006.01)

CPC (source: EP FI)  
**B29C 35/0227** (2013.01 - EP); **B29C 35/0244** (2013.01 - FI); **B29C 35/041** (2013.01 - EP FI); **B29C 35/16** (2013.01 - EP); **B29C 37/0064** (2013.01 - EP); **B29C 43/10** (2013.01 - FI); **B29C 43/52** (2013.01 - EP); **B29C 43/56** (2013.01 - EP); **B29C 70/34** (2013.01 - EP); **B29C 70/342** (2013.01 - FI); **B29C 70/44** (2013.01 - EP FI); **B29C 35/0238** (2013.01 - EP); **B29C 2035/1616** (2013.01 - EP); **B29C 2043/562** (2013.01 - EP); **B29C 2043/567** (2013.01 - EP); **B29C 2791/006** (2013.01 - EP); **B29C 2791/007** (2013.01 - EP)

Citation (search report)  
• [A] US 2016193755 A1 20160707 - HUMFELD KEITH DANIEL [US]  
• [A] US 6537483 B1 20030325 - CARTWRIGHT CRAIG LAWRENCE [US], et al  
• [A] US 2009309249 A1 20091217 - INSTON DAVID GRAHAM [GB]  
• See references of WO 2019166691A1

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)  
**WO 2019166691 A1 20190906**; EP 3758904 A1 20210106; EP 3758904 A4 20211201; FI 20185184 A1 20190828

DOCDB simple family (application)  
**FI 2019050143 W 20190222**; EP 19760693 A 20190222; FI 20185184 A 20180227