

Title (en)

SYSTEM AND METHOD FOR CONSOLIDATING LAYERS COMPRISING FIBRES TO A NONWOVEN WEB

Title (de)

ANLAGE UND VERFAHREN ZUM VERFESTIGEN VON FASERN UMFASSENDEN LAGEN ZU EINER VLIESBAHN

Title (fr)

INSTALLATION ET PROCÉDÉ DE CONSOLIDATION DES COUCHES COMPRENANT DES FIBRES EN UNE BANDE DE NON-TISSÉ

Publication

EP 4067549 B1 20230125 (DE)

Application

EP 22163582 A 20220322

Priority

DE 102021107901 A 20210329

Abstract (en)

[origin: US2022307177A1] An apparatus for bonding a first layer having short fibers with a second layer having long fibers into a non-woven web. The apparatus includes a first circulating belt on which the second layer is depositable and displacable, a second circulating belt via which the first layer is transferable at a transition point to the second layer, a pre-bonding unit arranged directly behind the transition point, and a bonding device. The pre-bonding unit has compactors which are spaced apart from one another. The compactors act in one region on the first or second circulating belt. The bonding device is arranged between the compactors and bonds together the first and second layers. The compactors and the bonding device are integrated into the apparatus to together be in an operating state when the first layer is transferred using the second circulating belt.

IPC 8 full level

D04H 1/49 (2006.01); **D04H 1/498** (2006.01); **D04H 1/732** (2006.01); **D04H 1/74** (2006.01)

CPC (source: CN EP IL US)

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D04H 1/74 (2013.01 - EP); **D04H 5/00** (2013.01 - CN); **D04H 5/03** (2013.01 - CN US); **D04H 5/08** (2013.01 - US); **D06C 11/00** (2013.01 - IL)

Citation (opposition)

Opponent : Trützschler Group

- US 2002157766 A1 20021031 - VUILLAUME ANDRE [FR], et al
- WO 2004063451 A1 20040729 - AHLSTROM BRIGNOUD [FR], et al
- WO 2005118934 A1 20051215 - DAN WEB HOLDING AS [DK], et al
- EP 3283679 B1 20201125 - TRUETZSCHLER GMBH & CO KG [DE], et al
- DE 102013107237 A1 20150115 - TRUETZSCHLER GMBH & CO KG [DE]
- DE 102008008549 A1 20080911 - FLEISSNER GMBH [DE]
- EP 3118361 A1 20170118 - TRUETZSCHLER GMBH & CO KG [DE], et al
- EP 1126064 A2 20010822 - FLEISSNER GEROLD [CH]
- WO 2008110134 A1 20080918 - FLEISSNER GMBH [DE], et al
- EP 1929080 B1 20090429 - KIMBERLY CLARK CO [US]
- WO 2015000685 A1 20150108 - VOITH PATENT GMBH [DE]

Designated contracting state (EPC)

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