

Title (en)

WET FORMED MAT HAVING IMPROVED HOT WET TENSILE STRENGTHS

Title (de)

NASSGEFORMTE MATTE MIT VERBESSERTER BRUCHFESTIGKEIT BEI HITZE ODER NÄSSE

Title (fr)

MAT FORMÉ EN VOIE HUMIDE PRÉSENTANT DE MEILLEURES RÉSISTANCES À LA RUPTURE PAR TRACTION À CHAUD DANS DES CONDITIONS HUMIDES

Publication

**EP 1917223 A1 20080507 (EN)**

Application

**EP 06801835 A 20060818**

Priority

- US 2006032320 W 20060818
- US 20822405 A 20050819

Abstract (en)

[origin: US2007039703A1] Wet-laid chopped strand glass mats for use in roofing applications that have improved hot wet tensile strengths are provided. The chopped strand mats are formed by the application or inclusion of at least one coupling agent to the chopped strand mat during a wet-laid mat forming process. The coupling agent may be added to the chopped strand mat as part of a two-part binder composition that includes a binder and at least one coupling agent. Alternatively, the coupling agent may be added directly to the chopped strand mat independent of the binder. As a further alternative, the coupling agent(s) may be added to the white water in the wet-laid mat forming process and incorporated into the formed glass mat via the glass fibers. The binder may be a modified urea-formaldehyde binder, a non-modified urea-formaldehyde binder, and/or a formaldehyde-free binder. The coupling agent(s) may be silane coupling agents and/or reactive siloxanes.

IPC 8 full level

**C03C 25/40** (2006.01); **E04D 5/00** (2006.01)

CPC (source: EP KR US)

**C03C 25/16** (2013.01 - EP US); **C03C 25/40** (2013.01 - KR); **D21H 13/40** (2013.01 - EP US); **E04D 5/00** (2013.01 - KR); **E04D 5/02** (2013.01 - EP US); **D21H 17/47** (2013.01 - EP US); **D21H 17/49** (2013.01 - EP US)

Citation (search report)

See references of WO 2007024683A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

**US 2007039703 A1 20070222**; CA 2617777 A1 20070301; CN 101300204 A 20081105; EP 1917223 A1 20080507; JP 2009504939 A 20090205; KR 20080081143 A 20080908; MX 2008002351 A 20080318; WO 2007024683 A1 20070301

DOCDB simple family (application)

**US 20822405 A 20050819**; CA 2617777 A 20060818; CN 200680038167 A 20060818; EP 06801835 A 20060818; JP 2008527167 A 20060818; KR 20087003995 A 20080219; MX 2008002351 A 20060818; US 2006032320 W 20060818