

Title (en)

FATTY AMIDE COMPOSITION FOR WET USE CHOPPED STRAND GLASS FIBERS

Title (de)

FETTSÄUREAMIDZUSAMMENSETZUNG FÜR GESCHNITTENE GLASFASERN ZUR FEUCHTEN VERWENDUNG

Title (fr)

COMPOSITION D'AMIDE GRAS POUR FIBRES DE VERRE A BASE DE FIBRES COUPEES PAR VOIE HUMIDE

Publication

EP 1765741 A1 20070328 (EN)

Application

EP 05758435 A 20050603

Priority

- US 2005019664 W 20050603
- US 86823104 A 20040615

Abstract (en)

[origin: US2005276960A1] A size composition containing one or more film forming agents, at least one coupling agent, and a fatty amide lubricant synthesized from a (poly)ethylene amine and a C₅-C₂₀ </SUB>unsaturated fatty acid is provided. The fatty acid is preferably a conjugated fatty acid and the (poly)ethylene amine is preferably tetraethylenepentamine. The fatty amide lubricant may be modified by maleinized rubber or carboxylated rubber. The size is advantageously applied to glass fibers such as wet use chopped strand glass and used to form roofing composites, such as shingles. The fatty amide lubricant facilitates interfacial bonding between the glass and asphalt through a vulcanizing mechanism. The unsaturation of the fatty amide modifies the surface energy of the glass fibers to make the glass more compatible with the asphalt, enhances the compatibility between the glass and the asphalt, and improves glass/asphalt interactions through the reduced interfacial tensions.

IPC 8 full level

C03C 25/24 (2006.01); **C03C 25/26** (2006.01); **C03C 25/32** (2006.01); **E04D 1/20** (2006.01); **E04D 1/26** (2006.01); **E04D 5/02** (2006.01)

CPC (source: EP KR US)

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Citation (search report)

See references of WO 2006001984A1

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