

Title (en)
A CROSS-LINKED ACRYLATE FIBER AND A METHOD FOR MANUFACTURING IT

Title (de)
VERNETZTE FASERN AUF ACRYLATBASIS UND IHRE HERSTELLUNG

Title (fr)
FIBRES RÉTICULÉES À BASE D'ACRYLATE ET LEUR PRODUCTION

Publication
EP 2327831 B1 20140122 (EN)

Application
EP 09812813 A 20090601

Priority
• JP 2009002428 W 20090601
• JP 2008231582 A 20080910

Abstract (en)
[origin: EP2327831A1] The present invention provides a cross-linked acrylate fiber having the color causing no unusual sense in the appearance even when used together with other fibers for industrial materials in the field of industrial materials which has not been provided in the prior art and also being advantageous in terms of the cost. A cross-linked acrylate fiber having a color where L* is 60 to 75, a* is 5.0 to 14.5 and b* is 23.0 to 30.0 in accordance with the expression method stipulated by JIS-Z-8729 can be manufactured according to such a manner that each of the treatments of (a) treatment for introduction of cross-linking by a hydrazine compound, (b) treatment by a peroxide and (c) hydrolyzing treatment using an alkaline metal compound are applied in the order of (a), (b) and (c) or in such an order that, after (a) is applied, (b) and (c) are then applied together. The present invention can achieve both of the high flame resisting property and the high speed of moisture absorption/desorption by using magnesium ion as the counter ion for at least a part of carboxyl groups in the cross-linked acrylate fiber.

IPC 8 full level
D06M 11/63 (2006.01); **D06M 11/00** (2006.01); **D06M 11/38** (2006.01); **D06M 11/50** (2006.01); **D06M 101/28** (2006.01)

CPC (source: EP)
D06M 11/38 (2013.01); **D06M 11/50** (2013.01); **D06M 11/63** (2013.01); **D06M 2101/28** (2013.01); **D06M 2200/00** (2013.01); **D06M 2200/30** (2013.01)

Designated contracting state (EPC)
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 SE SI SK TR

DOCDB simple family (publication)
EP 2327831 A1 20110601; **EP 2327831 A4 20120905**; **EP 2327831 B1 20140122**; CN 102066649 A 20110518; CN 102066649 B 20130515; JP 2010095843 A 20100430; JP 4487083 B2 20100623; JP 5029975 B2 20120919; JP WO2010029664 A1 20120202; KR 101593726 B1 20160218; KR 20110053254 A 20110519; WO 2010029664 A1 20100318

DOCDB simple family (application)
EP 09812813 A 20090601; CN 200980123608 A 20090601; JP 2009002428 W 20090601; JP 2009531508 A 20090601; JP 2010021928 A 20100203; KR 20117007384 A 20090601