

Title (en)  
POLYPHENYLENE SULFIDE FIBERS AND NONWOVEN FABRIC

Title (de)  
POLYPHENYLENSULFIDFASERN UND VLIESTOFF

Title (fr)  
FIBRES DE POLY(SULFURE DE PHÉNYLÈNE) ET TISSU NON TISSÉ

Publication  
**EP 2716800 A1 20140409 (EN)**

Application  
**EP 12792614 A 20120601**

Priority  
• JP 2011123994 A 20110602  
• JP 2012064256 W 20120601

Abstract (en)  
Provided are a polyphenylene sulfide fiber comprising a PPS resin as a main component and having both excellent heat resistance and excellent thermal bonding properties, and a nonwoven fabric comprising the fiber. The polyphenylene sulfide fiber comprises polyphenylene sulfide as a main component and having the sum of the crystallinity and the rigid amorphous fraction of 30% to 90%. The crystallinity is preferably not less than 5% and less than 25%. The polyphenylene sulfide fiber is used to form a nonwoven fabric. The nonwoven fabric is preferably produced by consolidation by thermal bonding or mechanical entanglement.

IPC 8 full level  
**D01F 6/76** (2006.01); **D04H 1/4326** (2012.01); **D04H 1/54** (2012.01); **D04H 3/14** (2012.01)

CPC (source: EP KR US)  
**D01F 6/76** (2013.01 - KR); **D01F 6/765** (2013.01 - EP US); **D04H 1/4326** (2013.01 - EP US); **D04H 1/44** (2013.01 - EP US);  
**D04H 1/54** (2013.01 - EP US); **D04H 3/009** (2013.01 - KR); **D04H 3/10** (2013.01 - KR); **D04H 3/14** (2013.01 - KR); **D01D 5/08** (2013.01 - EP US);  
**Y10T 442/60** (2015.04 - EP US); **Y10T 442/69** (2015.04 - EP US)

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)  
**EP 2716800 A1 20140409; EP 2716800 A4 20141105**; AU 2012263373 A1 20140109; AU 2012263373 B2 20161117;  
CN 103562446 A 20140205; CN 103562446 B 20151125; JP 5867400 B2 20160224; JP WO2012165608 A1 20150223;  
KR 101948637 B1 20190215; KR 20140032452 A 20140314; US 2014187115 A1 20140703; WO 2012165608 A1 20121206

DOCDB simple family (application)  
**EP 12792614 A 20120601**; AU 2012263373 A 20120601; CN 201280026741 A 20120601; JP 2012064256 W 20120601;  
JP 2012532391 A 20120601; KR 20137034150 A 20120601; US 201214122114 A 20120601