

Title (en)
ANTIBACTERIAL FIBER, AND METHOD FOR MANUFACTURING ANTIBACTERIAL FIBER

Title (de)
ANTIBAKTERIELLE FASER UND VERFAHREN ZUR HERSTELLUNG EINER ANTIBAKTERIELLEN FASER

Title (fr)
FIBRE ANTIBACTÉRIENNE, ET PROCÉDÉ DE FABRICATION DE FIBRE ANTIBACTÉRIENNE

Publication
EP 3683341 A4 20200722 (EN)

Application
EP 19798520 A 20190603

Priority
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Abstract (en)
[origin: EP3683341A1] Provided are an antibacterial fiber in which the amount of incorporation of an antibacterial glass is made sufficient with a small amount by reducing the content of the antibacterial glass in a core portion compared to the content of the antibacterial glass in a sheath portion, and which could exhibit excellent antibacterial properties; and an efficient method for producing such an antibacterial fiber. Disclosed is an antibacterial fiber containing a thermoplastic resin and an antibacterial glass as mixing components, the antibacterial fiber having an average diameter adjusted to a value within the range of 1 to 50 μm , the antibacterial fiber including a core portion and a sheath portion, in which when a content of the antibacterial glass in the core portion is designated as Q1 (weight%) with respect to the total amount of the antibacterial fiber, and a content of the antibacterial glass in the sheath portion is designated as Q2 (weight%) with respect to the total amount of the antibacterial fiber, Q1 and Q2 satisfy the following relational expression (1): $Q1 < Q2$

IPC 8 full level
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CPC (source: EP KR US)
D01D 5/34 (2013.01 - EP KR); **D01F 1/10** (2013.01 - EP); **D01F 1/103** (2013.01 - EP KR US); **D01F 8/04** (2013.01 - EP); **D01F 8/06** (2013.01 - US); **D01F 8/12** (2013.01 - US); **D01F 8/14** (2013.01 - EP US); **D10B 2101/06** (2013.01 - US); **D10B 2321/022** (2013.01 - US); **D10B 2331/02** (2013.01 - US); **D10B 2331/04** (2013.01 - US); **D10B 2401/13** (2013.01 - KR US)

Citation (search report)
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• [X] US 2010055437 A1 20100304 - FINK E DAVID [US], et al
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Designated contracting state (EPC)
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DOCDB simple family (publication)
EP 3683341 A1 20200722; **EP 3683341 A4 20200722**; CN 111542654 A 20200814; JP 6707725 B1 20200610; JP WO2020115928 A1 20210215; KR 102243796 B1 20210423; KR 20200070157 A 20200617; TW 202021924 A 20200616; TW I708750 B 20201101; US 2021332502 A1 20211028; WO 2020115928 A1 20200611

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EP 19798520 A 20190603; CN 201980002401 A 20190603; JP 2019021950 W 20190603; JP 2020504742 A 20190603; KR 20197032995 A 20190603; TW 108141410 A 20191114; US 201916613854 A 20190603