

Title (en)  
COMPOSITE FIBER COMPRISING CELLULOSE FIBER AND INORGANIC PARTICLES, AND MANUFACTURING METHOD FOR SAME

Title (de)  
VERBUNDFASER AUS ZELLULOSEFASERN UND ANORGANISCHEN TEILCHEN UND VERFAHREN ZU IHRER HERSTELLUNG

Title (fr)  
FIBRE COMPOSITE COMPRENANT UNE FIBRE DE CELLULOSE ET DES PARTICULES INORGANIQUES, ET SON PROCÉDÉ DE FABRICATION

Publication  
**EP 4026946 A4 20230830 (EN)**

Application  
**EP 20861180 A 20200904**

Priority  
• JP 2019163073 A 20190906  
• JP 2020033627 W 20200904

Abstract (en)  
[origin: EP4026946A1] The present invention aims to provide complex fibers comprising a cellulose fiber strongly covered by a lot of inorganic particles on its surface. In the present invention, an excellent complex fiber of a cellulose fiber with inorganic particles can be prepared on the basis of the value of (D50 - D10) / D50 calculated from the particle size distribution of (a) or (b) below: (a) the filtrate obtained by filtering an aqueous suspension of the complex fiber at a solids content of 0.1 % through a 60-mesh sieve (having an opening of 250  $\mu$ m); or (b) the fraction corresponding to an effluent volume (L) of 18.51 to 19.50 and an efflux time (sec) of 37.4 to 48.0 when an aqueous suspension of the complex fiber at a solids content of 0.3 % is classified using a fiber classification analyzer under the conditions of a flow rate of 5.7 L/min, a water temperature of  $25 \pm 1$  °C, and a total effluent volume of 22 L.

IPC 8 full level  
**D21H 17/70** (2006.01); **D21H 15/12** (2006.01); **D21H 17/69** (2006.01)

CPC (source: CN EP US)  
**D06M 11/56** (2013.01 - CN); **D21H 15/12** (2013.01 - EP US); **D21H 17/66** (2013.01 - US); **D21H 17/69** (2013.01 - EP); **D21H 17/70** (2013.01 - EP US); **D06M 2101/06** (2013.01 - CN)

Citation (search report)  
• [X] EP 3358073 A1 20180808 - JUJO PAPER CO LTD [JP]  
• [X] WO 2011098672 A1 20110818 - KEMIRA OYJ [FI], et al  
• [X] EP 3127868 A1 20170208 - JUJO PAPER CO LTD [JP]  
• See references of WO 2021045198A1

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 4026946 A1 20220713**; **EP 4026946 A4 20230830**; CN 114144553 A 20220304; JP 2022133416 A 20220913; JP 7123178 B2 20220822; JP WO2021045198 A1 20210927; US 2022290373 A1 20220915; WO 2021045198 A1 20210311

DOCDB simple family (application)  
**EP 20861180 A 20200904**; CN 202080053008 A 20200904; JP 2020033627 W 20200904; JP 2020567177 A 20200904; JP 2022109386 A 20220707; US 202017636278 A 20200904