

Title (en)

HYBRID YARNS, METHODS OF MAKING HYBRID YARNS AND FABRICS MADE OF HYBRID YARNS

Title (de)

HYBRIDGARNE, VERFAHREN ZUR HERSTELLUNG VON HYBRIDGARNEN UND STOFFE AUS HYBRIDGARNEN

Title (fr)

FILS HYBRIDES, PROCÉDÉS DE FABRICATION DE FILS HYBRIDES ET TISSUS FABRIQUÉS À PARTIR DE FILS HYBRIDES

Publication

EP 3207172 A4 20180808 (EN)

Application

EP 15851590 A 20151013

Priority

- US 201462063830 P 20141014
- US 2015055346 W 20151013

Abstract (en)

[origin: WO2016061112A1] A hybrid yarn and a fabric including the hybrid yarn are provided. The hybrid yarn is formed of a plurality of fibers of a plurality of different fiber compositions. The different fiber compositions are interspersed throughout the yarn. The yarn may be formed using fibers made of the same material or a plurality of different materials. The different fiber compositions may include fibers of three or more different cross sections, fibers made of different materials or a combination of the two. The materials may be synthetic and/or natural materials. The yarn may be constructed to impart selectable functional characteristics to a fabric without the need to include chemicals to impart those characteristics. Fabrics made with the hybrid yarn will have selectable functional features and also be of lighter weight than previously possible. Hybrid spinnerets may be used to produce hybrid yarns with three or more different fiber cross sections.

IPC 8 full level

D02G 3/04 (2006.01); **D02G 3/28** (2006.01); **D02G 3/36** (2006.01)

CPC (source: EP KR US)

D02G 3/04 (2013.01 - EP KR US); **D02G 3/22** (2013.01 - US); **D02G 3/28** (2013.01 - KR); **D02G 3/36** (2013.01 - KR US);
D02G 3/44 (2013.01 - EP US); **D10B 2401/02** (2013.01 - EP US)

Citation (search report)

- [X] WO 2014018221 A1 20140130 - DRIFIRE LLC [US]
- [X] JP 2014167185 A 20140911 - TORAY INDUSTRIES
- [XI] US 2004242101 A1 20041202 - SHOEMAKER RICHARD T [US]
- [X] WO 2010060943 A1 20100603 - DSM IP ASSETS BV [NL], et al
- [X] WO 03074769 A1 20030912 - DU PONT [US], et al
- [XI] WO 2013129135 A1 20130906 - TORAY INDUSTRIES [JP]
- [X] US 3220173 A 19651130 - GILBERT PITZL
- [X] GB 947183 A 19640122 - HOECHST AG
- [XI] JP H0734342 A 19950203 - TORAY INDUSTRIES
- See references of WO 2016061112A1

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)

WO 2016061112 A1 20160421; CA 2964561 A1 20160421; CN 107109715 A 20170829; EP 3207172 A1 20170823; EP 3207172 A4 20180808;
JP 2017531745 A 20171026; KR 20170067861 A 20170616; MX 2017004821 A 20171120; TW 201623712 A 20160701;
US 2017233901 A1 20170817

DOCDB simple family (application)

US 2015055346 W 20151013; CA 2964561 A 20151013; CN 201580067662 A 20151013; EP 15851590 A 20151013;
JP 2017520525 A 20151013; KR 20177012759 A 20151013; MX 2017004821 A 20151013; TW 104133743 A 20151014;
US 201515518996 A 20151013