

Title (en)

CONDUCTIVE YARN AND ARTICLE HAVING WIRING LINE THAT IS FORMED OF CONDUCTIVE YARN

Title (de)

LEITFÄHIGES GARN UND ARTIKEL MIT AUS DEM LEITFÄHIGEN GARN GEFORMTER VERDRAHTUNGSLEITUNG

Title (fr)

FIL CONDUCTEUR ET ARTICLE AYANT UNE LIGNE DE CÂBLAGE QUI EST FORMÉE D'UN FIL CONDUCTEUR

Publication

EP 4141155 A4 20240417 (EN)

Application

EP 21792845 A 20210325

Priority

- JP 2020076690 A 20200423
- JP 2021012739 W 20210325

Abstract (en)

[origin: EP4141155A1] [Problem] To provide a conductive yarn which has conductivity that exhibits durability in terms of deformation and tensile force, while being free from the occurrence of twisting or slackening during sewing. The present invention is capable of providing an article that is provided with a flexible wiring line having a free shape by means of an easy method of sewing.[Solution] A conductive yarn which is characterized by comprising a non-twisted high-strength filament yarn, a first conductive filament yarn that covers the high-strength filament yarn with a Z twist, and a second conductive filament yarn that covers the high-strength filament yarn with an S twist. In addition, an article which has a wiring line that is formed of this conductive yarn.

IPC 8 full level

D02G 3/38 (2006.01); **D02G 3/04** (2006.01); **D02G 3/28** (2006.01)

CPC (source: EP US)

D02G 3/38 (2013.01 - US); **D02G 3/441** (2013.01 - EP); **D02G 3/46** (2013.01 - EP); **D02G 3/28** (2013.01 - EP); **D10B 2321/0211** (2013.01 - EP)

Citation (search report)

- [XY] WO 2007117883 A2 20071018 - FEDERAL MOGUL CORP [US], et al
- [Y] WO 2009037631 A1 20090326 - KONINKL PHILIPS ELECTRONICS NV [NL], et al
- [A] US 2012100386 A1 20120426 - HONMA YOSHITERU [JP], et al
- [A] US 2012225275 A1 20120906 - HONMA YOSHITERU [JP], et al
- [A] JP 2010236167 A 20101021 - UNITIKA TRADING CO LTD
- See also references of WO 2021215190A1

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 4141155 A1 20230301; EP 4141155 A4 20240417; CN 115427619 A 20221202; JP WO2021215190 A1 20211028;
US 2023095403 A1 20230330; WO 2021215190 A1 20211028

DOCDB simple family (application)

EP 21792845 A 20210325; CN 202180030271 A 20210325; JP 2021012739 W 20210325; JP 2022516911 A 20210325;
US 202117800291 A 20210325