



(43) International Publication Date
31 October 2013 (31.10.2013)

- (51) International Patent Classification:
D07B 1/06 (2006.01)
- (21) International Application Number:
PCT/EP2013/057834
- (22) International Filing Date:
15 April 2013 (15.04.2013)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
12165260.6 24 April 2012 (24.04.2012) EP
- (71) Applicants: **NV BEKAERT SA** [BE/BE]; Bekaertstraat 2, B-8550 Zwevegem (BE). **DSM IP ASSETS B.V.** [NL/NL]; Het Overloon 1, NL-6411 TE Heerlen (NL).
- (72) Inventors: **AMILS, Xavier**; President Rooseveltplein 16A, Bus 12, B-8500 Kortrijk (BE). **DURMUS, Beste**; Koolstraat 34/11, B-1000 Brussel (BE). **SMEETS, Paulus Johannes Hyacinthus Marie**; Steegske 7, NL-6243 AK Geule (NL).
- (74) Agent: **MESSELY, Marc**; Bekaertstraat 2, B-8550 Zwevegem (BE).
- (81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT,

HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

— *of inventorship (Rule 4.17(iv))*

Published:

— *with international search report (Art. 21(3))*
— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

(88) Date of publication of the international search report:

19 December 2013

(54) Title: HYBRID ROPE OR HYBRID STRAND

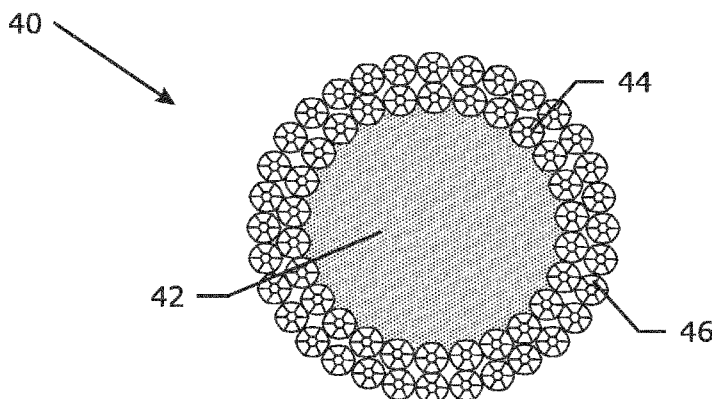


Fig. 4

(57) Abstract: A hybrid rope (40) or a hybrid strand (50) comprising a core element (42, 52), a first (44, 54) and a second (46, 56) metallic closed layer surrounding said core element (42, 52). The core element (42, 52) includes a bundle of synthetic yarns. The first metallic closed layer (44, 54) includes a plurality of first strands of wires helically twisted together with the core element (42, 52) in a first direction. The second metallic closed layer (46, 56) includes a plurality of second wires or strands helically twisted together with said core element (42, 52) and said first metallic closed layer (44, 54) in a second direction. The cross-sectional area of the core element (42, 52) is larger than the total cross-sectional area of the first (44, 54) and second (46, 56) metallic closed layers. A corresponding method of producing such a hybrid rope or hybrid strand is also disclosed.

