

Title (en)
TWISTING DISK AND METHOD FOR THE PRODUCTION THEREOF

Title (de)
DRALLSCHEIBE SOWIE VERFAHREN ZUR HERSTELLUNG EINER DRALLSCHEIBE

Title (fr)
DISQUE DE TORSION ET PROCEDE PERMETTANT DE PRODUIRE UN DISQUE DE TORSION

Publication
EP 1082475 A1 20010314 (DE)

Application
EP 99910077 A 19990407

Priority
• CH 9900141 W 19990407
• DE 19815578 A 19980407

Abstract (en)
[origin: DE19815578C1] The friction disk (1), for false twisting textile yarns (4,6), has a tire (8) as the peripheral rounded friction surface (7). The tire is of a compound material, with an aramide filling, or a filling based on other plastics with high temp. resistance. The high temp. resistance component of the compound material is in a concentration of 1-50%. The proportion of high temp. resistance materials is pref. 2-20%. The peripheral tire (8) has a thin wall, with a wall thickness of at least 1-3 mm. The tire (8) has a constant thickness all round. The tire (8) is fitted to the hub (9) as a cap, in a force fit bond. The disk hub (9) has a support ring, with a shape close to the outer friction surface (7) of the tire (8), encapsulated by the tire (8). The hub (9) is injection molded, with a number of spokes for the bonded support ring, enclosed by the compound material, or the spoke structure is bonded to a number of support bodies enclosed in the compound material. The tire (8) is injection molded, using a thermoplastic material with an aramide filling. An Independent claim is included for a false twisting disk prodn. process using a disk with a peripheral tire (8) of a polyurethane based on para-phenylenediisocyanate (PPDI) using polycarbonate and polyethercarbonatediolene and their mixtures, shaped in a high pressure injection molding process. Preferred Features: The hub (9) is of a special modified hard thermoplastic and pref. hard thermoplastic polyurethane (TPU) with a glass fiber content of \-10%. The molded hub (9) is placed in the mold, for the tire (8) to be injection molded round it in a second stage. The molded disk structure (1) is ground for balancing to give true running. The friction disk (1) can be molded in a single stage, with two or more mold sections forming a single mold. At least the materials of the tire and the hub are colored for quality marking, with pref. orange for the hub material and a lighter color for the tire such as yellow, green or gray, or even red or blue.

IPC 1-7
D02G 1/08

IPC 8 full level
D01H 7/92 (2006.01); **D02G 1/08** (2006.01)

CPC (source: EP)
D01H 7/923 (2013.01); **D02G 1/082** (2013.01); **D02G 1/087** (2013.01)

Citation (search report)
See references of WO 9951803A1

Cited by
DE102019112892A1; EP3739091A1

Designated contracting state (EPC)
CH DE DK ES FR GB IT LI NL SE

DOCDB simple family (publication)
DE 19815578 C1 19990826; AU 2919399 A 19991025; DE 59902473 D1 20021002; EP 1082475 A1 20010314; EP 1082475 B1 20020828; TW 459077 B 20011011; WO 9951803 A1 19991014

DOCDB simple family (application)
DE 19815578 A 19980407; AU 2919399 A 19990407; CH 9900141 W 19990407; DE 59902473 T 19990407; EP 99910077 A 19990407; TW 88105094 A 19990331