

Title (en)
TORSION BAR FOR APPLICATION IN BELT WINDERS FOR SAFETY BELTS

Title (de)
TORSIONSSTAB ZUM EINSATZ BEI GURTAUFROLLERN FÜR SICHERHEITSGURTE

Title (fr)
BARRE DE TORSION A UTILISER DANS DES ENROULEURS DE CEINTURES DE SECURITE

Publication
EP 1692021 A1 20060823 (DE)

Application
EP 04804682 A 20041206

Priority
• EP 2004053276 W 20041206
• DE 10357979 A 20031211

Abstract (en)
[origin: WO2005056349A1] The invention relates to a torsion bar (1), for application in belt winders for safety belts, provided on the end sections thereof with embodiments of drive and/or locking elements (2, 3), for positive connection to the corresponding devices. The torsion bar (1) and the drive and /or locking elements (2, 3) embodied on the ends thereof is produced in one piece from a non-ferrous metal, using varying extrusions in order to achieve differing torques with constant dimensions for the drive and /or locking elements (2, 3) with variable diameters for the torsion bar (1).

IPC 8 full level
B60R 22/28 (2006.01); **B60R 22/34** (2006.01); **F16F 1/14** (2006.01)

CPC (source: EP KR US)
B60R 22/28 (2013.01 - KR); **B60R 22/3413** (2013.01 - EP KR US); **C22F 1/04** (2013.01 - KR); **F16F 1/14** (2013.01 - EP KR US);
B60R 2022/287 (2013.01 - EP KR US); **B60Y 2304/03** (2013.01 - KR)

Citation (search report)
See references of WO 2005056349A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2005056349 A1 20050623; CA 2543494 A1 20050623; CA 2543494 C 20120117; DE 10357979 A1 20050721; DE 10357979 B4 20061005;
EP 1692021 A1 20060823; JP 2007516128 A 20070621; KR 20060105744 A 20061011; US 2008246266 A1 20081009;
US 2010320303 A1 20101223

DOCDB simple family (application)
EP 2004053276 W 20041206; CA 2543494 A 20041206; DE 10357979 A 20031211; EP 04804682 A 20041206; JP 2006543537 A 20041206;
KR 20067006848 A 20060410; US 57473504 A 20041206; US 87266210 A 20100831