

Title (en)  
CONTINUOUS CONVEYOR FOR TRANSPORTING HEAVY BULK MATERIAL OR ARTICLES

Title (de)  
STETIGFÖRDERER ZUM TRANSPORT VON SCHWEREM SCHÜTT- ODER STÜCKGUT

Title (fr)  
CONVOYEUR CONTINU POUR LE TRANSPORT DE PRODUITS LOURDS, EN VRAC OU EN COLIS

Publication  
**EP 2741980 A1 20140618 (DE)**

Application  
**EP 12719677 A 20120503**

Priority  

- EP 11177042 A 20110810
- EP 2012058117 W 20120503
- EP 12719677 A 20120503

Abstract (en)  
[origin: WO2013020725A1] A continuous conveyor, for example a conveying belt for transporting heavy bulk material or articles, comprises an endless transporting belt (1) which circulates between a drive roller (2) and a deflecting roller (3). The drive roller (2) is driven by a permanently excited high-pole synchronous motor (6) which, at a comparatively low nominal rotational speed, provides for a very high torque. The synchronous motor (6) can drive the drive roller (2) directly or, as an alternative, can also drive the same via a single-stage reduction-gear mechanism (15) with a low step-down factor. The drive according to the invention is distinguished by a mass moment of inertia which is up to 10 times lower than that of conventional drive systems. This vastly reduces the risk of damage to, or even cracking of, the transporting belt (1) in the event of problems, and therefore the operational reliability is significantly increased.

IPC 8 full level  
**B65G 23/00** (2006.01); **H02K 7/10** (2006.01)

CPC (source: EP US)  
**B65G 15/30** (2013.01 - US); **B65G 23/00** (2013.01 - EP US); **B65G 23/22** (2013.01 - EP US); **B65G 23/24** (2013.01 - US); **B65G 39/12** (2013.01 - US); **H02K 7/1004** (2013.01 - EP US); **H02K 7/116** (2013.01 - EP US); **H02K 19/02** (2013.01 - US)

Citation (search report)  
See references of WO 2013020725A1

Citation (examination)  

- CN 201280334 Y 20090729 - YANGQUAN HUAXIN MINING TRANSPOR [CN]
- EP 2562102 A1 20130227 - SIEMENS AG [DE], et al
- FR 2944164 A1 20101008 - ALSTOM TRANSPORT SA [FR]
- "Advanced Drive System Saves up to 20% Energy", 22 August 2011 (2011-08-22), Germany, pages 1 - 12, XP055076615, Retrieved from the Internet <URL:-> [retrieved on 20130827], DOI: A19199-E273-B198-X-7600
- GMBH THYSSENKRUPP FÖRDERTECHNIK: "Gearless Conveyor Drives", 31 August 2011 (2011-08-31), XP055358957, Retrieved from the Internet <URL:http://thyssenkruppobins.com/Publications/Brochures/pdf files/1028-Gearless Drive\_brochure.pdf> [retrieved on 20170327]
- SIEMENS: "Press Presse Press Presse Industry Sector Industry Solutions Division", 10 December 2010 (2010-12-10), XP055359212, Retrieved from the Internet <URL:http://www.siemens.com/press/pool/de/pressemitteilungen/2010/industry\_solutions/II201012700e.pdf> [retrieved on 20170327]

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 2013020725 A1 20130214**; AU 2012292578 A1 20140227; AU 2012292578 B2 20170309; CN 103906691 A 20140702; EA 028453 B1 20171130; EA 201400209 A1 20140930; EP 2741980 A1 20140618; UA 109733 C2 20150925; US 10589936 B2 20200317; US 2014151197 A1 20140605; US 2017022013 A1 20170126; US 9527670 B2 20161227

DOCDB simple family (application)  
**EP 2012058117 W 20120503**; AU 2012292578 A 20120503; CN 201280039108 A 20120503; EA 201400209 A 20120503; EP 12719677 A 20120503; UA A201402310 A 20120503; US 201414175326 A 20140207; US 201615285580 A 20161005