

Title (en)

METHOD FOR MANUFACTURING CYLINDER BODY OF ACTUATING CYLINDER AND CONCRETE PUMPING APPARATUS

Title (de)

VERFAHREN ZUR HERSTELLUNG DES ZYLINDERKÖRPERS EINES BETÄTIGUNGSZYLINDERS UND BETONPUMPE

Title (fr)

PROCÉDÉ DE FABRICATION D'UN CORPS DE CYLINDRE D'UN VÉRIN DE COMMANDE ET APPAREIL DE POMPAGE DE BÉTON

Publication

EP 2749776 A1 20140702 (EN)

Application

EP 12878834 A 20121207

Priority

- CN 201210195986 A 20120614
- CN 2012086108 W 20121207

Abstract (en)

The present invention discloses a cylinder body of an actuating cylinder, comprising an inner lining layer (1) and a first fibrous composite layer (2) bonded on the outside of the inner lining layer (1), wherein, the first fibrous composite layer is composed from a first fibrous material and a substrate resin material. The present invention further discloses a concrete pumping apparatus having the cylinder body. Accordingly, the present invention further discloses a method of manufacturing a cylinder body of cylinder body, comprising: an inner lining layer forming step: forming an inner lining layer; and, a bonding step: forming a first fibrous composite layer composed from a first fibrous material and a substrate resin material, and bonding the first fibrous composite layer on the outside of the inner lining layer. With the above technical scheme, the cylinder body of an actuating cylinder has high strength, light weight, high fatigue resistance, high corrosion resistance and low thermal expansibility. In addition, since the inner lining layer of the cylinder body can meet the requirements for leak tightness of the inner wall of cylinder body and wear resistance when contacts with the piston, the service performance of the cylinder body will not be degraded.

IPC 8 full level

F15B 15/14 (2006.01)

CPC (source: EP)

F04B 9/08 (2013.01); **F04B 15/02** (2013.01); **F15B 15/1428** (2013.01); **F05C 2253/04** (2013.01); **F05C 2253/20** (2013.01);
F15B 2215/305 (2013.01)

Citation (search report)

See references of WO 2013185451A1

Cited by

EP3260369A1; DE102015224913A1; US10272991B2

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 2749776 A1 20140702; CN 102705293 A 20121003; CN 102705293 B 20140409; IN 740KON2014 A 20151002;
WO 2013185451 A1 20131219

DOCDB simple family (application)

EP 12878834 A 20121207; CN 2012086108 W 20121207; CN 201210195986 A 20120614; IN 740KON2014 A 20140402