

Title (en)
TUBE CORE FOR HUMID ENVIRONMENT

Title (de)
ROHRKERN FÜR FEUCHTE UMGEBUNG

Title (fr)
NOYAU DE TUBE POUR ENVIRONNEMENT HUMIDE

Publication
EP 2726389 A4 20150325 (EN)

Application
EP 12804931 A 20120626

Priority
• US 201161502639 P 20110629
• US 2012044190 W 20120626

Abstract (en)
[origin: WO2013003340A2] The invention relates to tube cores for yarn, especially elastomeric yarn such as spandex. The tube cores include a moisture barrier, which provides an increase in strength for a tube core including the same amount of paper or a maintenance of strength for a tube core including a reduced amount of paper.

IPC 8 full level
B65H 75/10 (2006.01)

CPC (source: CN EP US)
B65H 75/04 (2013.01 - CN); **B65H 75/10** (2013.01 - EP US); **B65H 2701/31** (2013.01 - US); **B65H 2701/319** (2013.01 - EP US);
B65H 2701/5112 (2013.01 - EP US)

Citation (search report)
• [IA] US 2006026997 A1 20060209 - SWEETMAN JOEL G [US], et al
• [A] DE 4221574 A1 19940105 - STRAPEX HOLDING AG [CH]
• [A] DE 2048885 A1 19720406

Citation (examination)
• CN 2511648 Y 20020918 - JINGXING PAPER TUBE CO LTD PIN [CN]
• CN 2505462 Y 20020814 - JINGXING PAPER TUBE CO LTD PIN [CN]

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 2013003340 A2 20130103; WO 2013003340 A3 20130314; BR 112013033762 A2 20170207; CN 103732520 A 20140416;
CN 105502097 A 20160420; EP 2726389 A2 20140507; EP 2726389 A4 20150325; JP 2014520686 A 20140825; KR 20140043803 A 20140410;
MX 2014000128 A 20140730; SG 10201500712U A 20150429; US 2014217224 A1 20140807

DOCDB simple family (application)
US 2012044190 W 20120626; BR 112013033762 A 20120626; CN 201280032736 A 20120626; CN 201610001844 A 20120626;
EP 12804931 A 20120626; JP 2014518911 A 20120626; KR 20147002011 A 20120626; MX 2014000128 A 20120626;
SG 10201500712U A 20120626; US 201214128699 A 20120626