

Title (en)

RING-TRAVELER SYSTEM OF RING-TYPE SPINNING MACHINE

Title (de)

RINGLÄUFERSYSTEM EINER RINGSPINNMASCHINE

Title (fr)

SYSTÈME D#ANNEAU-CURSEUR POUR MÉTIER À FILER À ANNEAUX

Publication

EP 3587633 A1 20200101 (EN)

Application

EP 19180784 A 20190618

Priority

JP 2018120701 A 20180626

Abstract (en)

A ring-traveler system of a ring-type spinning machine in which liquid lubricant is not applied for sliding movement the ring-traveler system including a plurality of cracks (15) formed in a sliding surface (14) between a ring (11) and a traveler (12). The plurality of cracks (15) has an average crack width of 0.5 μm or greater and 1.5 μm or less. An average of the number of cracks is less than 400 cracks per centimeter.

IPC 8 full level

C25D 7/04 (2006.01); **D01H 7/60** (2006.01)

CPC (source: CN EP)

C25D 5/02 (2013.01 - EP); **C25D 5/48** (2013.01 - EP); **C25D 7/04** (2013.01 - EP); **C25F 3/02** (2013.01 - EP); **D01H 7/60** (2013.01 - CN); **D01H 7/602** (2013.01 - EP); **D01H 7/604** (2013.01 - EP)

Citation (applicant)

JP 2014029046 A 20140213 - TOYOTA IND CORP

Citation (search report)

- [X] US 6360520 B2 20020326 - POQUETTE GEREON E [US], et al
- [AD] EP 2682507 A2 20140108 - TOYOTA JIDOSHOKKI KK [JP]
- [A] EP 3009541 A1 20160420 - TOYOTA JIDOSHOKKI KK [JP]

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 3587633 A1 20200101; **EP 3587633 B1 20220907**; CN 110644084 A 20200103; CN 110644084 B 20221216; JP 2020002484 A 20200109; JP 7163632 B2 20221101

DOCDB simple family (application)

EP 19180784 A 20190618; CN 201910553793 A 20190625; JP 2018120701 A 20180626