

Title (en)
Sewing machine needle with coupling tool preventing loss

Title (de)
Strickmaschinennadel mit verliersicherem Kupplungsteil

Title (fr)
Aiguille de machine à tricoter dotée d'un élément d'embrayage protégé contre la perte

Publication
EP 2284308 B1 20171108 (DE)

Application
EP 09167092 A 20090803

Priority
EP 09167092 A 20090803

Abstract (en)
[origin: EP2284308A1] The needle (1) has a coupling member (3) bearing a coupling dial head (15) matching a needle coupling recess. The dial head includes a counter bearing surface (18) on a circumference and a coupling member coupling recess that is enclosed on three sides by a bearing surface and matches a needle dial head. A set of transverse bearing surfaces is provided on the coupling member and a needle body (2), where the transverse bearing surfaces are in temporarily abutment with each other and oriented transversely with respect to the bearing surface and the counter bearing surface.

IPC 8 full level
D04B 35/02 (2006.01); **D04B 15/00** (2006.01); **D04B 35/04** (2006.01)

CPC (source: EP KR US)
D04B 15/00 (2013.01 - KR); **D04B 35/00** (2013.01 - KR); **D04B 35/02** (2013.01 - EP KR US); **D04B 35/04** (2013.01 - EP KR US)

Citation (examination)
• EP 1241287 A1 20020918 - GROZ BECKERT KG [DE]
• WO 2008003463 A1 20080110 - SANTONI & C SPA [IT], et al

Designated contracting state (EPC)
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 SE SI SK SM TR

DOCDB simple family (publication)
EP 2284308 A1 20110216; EP 2284308 B1 20171108; CN 101994205 A 20110330; CN 101994205 B 20130123; JP 2011038236 A 20110224;
JP 6220489 B2 20171025; KR 101884679 B1 20180802; KR 20110014098 A 20110210; KR 20170124498 A 20171110; PT 2284308 T 20171213;
TW 201128012 A 20110816; TW I418678 B 20131211; US 2011023553 A1 20110203; US 7971453 B2 20110705

DOCDB simple family (application)
EP 09167092 A 20090803; CN 201010289354 A 20100802; JP 2010171445 A 20100730; KR 20100072711 A 20100728;
KR 20170142477 A 20171030; PT 09167092 T 20090803; TW 99125551 A 20100802; US 84858510 A 20100802