

Title (en)
Friction yarn feeding device with vibration actuator

Title (de)
Friktionsfournisseur mit Vibrationsanregung

Title (fr)
Fournisseur en fil à friction doté de vibration

Publication
EP 1126063 A3 20020626 (DE)

Application
EP 01101483 A 20010124

Priority
DE 10006599 A 20000215

Abstract (en)
[origin: CA2331910A1] In connection with a vibration friction feed wheel mechanism, having a thread guide lever for inserting and removing a thread, the application of vibrations to the thread guide elements, or the application of vibrations to the thread feed wheel, is used to improve the removal properties of the friction feed wheel mechanism.

IPC 1-7
D04B 15/48; **B65H 51/06**

IPC 8 full level
B65H 51/22 (2006.01); **B65H 51/06** (2006.01); **B65H 54/42** (2006.01); **B65H 59/10** (2006.01); **B65H 59/14** (2006.01); **D04B 15/48** (2006.01)

CPC (source: EP KR US)
D04B 15/48 (2013.01 - EP KR US); **B65H 51/06** (2013.01 - KR); **B65H 57/06** (2013.01 - KR)

Citation (search report)
• [X] US 4793565 A 19881227 - FECKER JOSEF [DE]
• [Y] US 4457144 A 19840703 - SAWAZAKI MASATOSHI [JP]
• [Y] GB 1375589 A 19741127
• [A] US 4752044 A 19880621 - MEMMINGER GUSTAV [DE], et al

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WO2020250085A1; EP1422328A1; BE1027360B1; CN113874307A

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)
EP 1126063 A2 20010822; **EP 1126063 A3 20020626**; BR 0100530 A 20011002; CA 2331910 A1 20010815; CN 1309201 A 20010822; CZ 2001550 A3 20011017; DE 10006599 A1 20010823; JP 2001240308 A 20010904; KR 20010082052 A 20010829; MX PA01001700 A 20020806; PL 345530 A1 20010827; RU 2207974 C2 20030710; SG 89372 A1 20020618; TW 541373 B 20030711; UA 54609 C2 20030317; US 2002047034 A1 20020425; US 6446853 B1 20020910

DOCDB simple family (application)
EP 01101483 A 20010124; BR 0100530 A 20010213; CA 2331910 A 20010123; CN 01104554 A 20010215; CZ 2001550 A 20010213; DE 10006599 A 20000215; JP 2001031742 A 20010208; KR 20010005794 A 20010207; MX PA01001700 A 20010214; PL 34553001 A 20010131; RU 2001104314 A 20010214; SG 200100352 A 20010123; TW 90102697 A 20010208; UA 200120945 A 20010212; US 78348601 A 20010214