

Title (en)
BOBBIN FIXING DEVICE AND BOBBIN REMOVING DEVICE

Title (de)
SPULENKÖRPERBEFESTIGUNGSVORRICHTUNG UND SPULENKÖRPERENTFERNUNGSVORRICHTUNG

Title (fr)
DISPOSITIF DE FIXATION DE BOBINE ET DISPOSITIF DE RETRAIT DE BOBINE

Publication
EP 1950161 A1 20080730 (EN)

Application
EP 06811875 A 20061017

Priority

- JP 2006320620 W 20061017
- JP 2005303117 A 20051018
- JP 2005352124 A 20051206

Abstract (en)
The present invention provides a bobbin fixing device capable of fixing a bobbin easily with a simple structure and also provides a bobbin removing device capable of removing a bobbin readily with a simple structure. Stoppers 35 project from the level of the outer surface of a rotating shaft 23. Sloping surface of each stopper 35 is pressed by a bobbin 10, so that the stopper is moved to an inner position P2. The bobbin 10 is attached so as to position on a positioning member 25. When the bobbin 10 is brought into contact with the positioning member 25, each support 34B upwardly moves together with a release button 32 biased by a spring 33, so that one end of each arm 34A on the associated support 34B moves upward and the other end thereof close to the associated stopper 35 moves downward. Thus, each stopper 35 outwardly moves and projects until a restricting face 35C of the stopper 35 is brought into contact with the bobbin 10. At that time, a retaining face 35B of each stopper 35 is in contact with the top surface of the bobbin 10, thus restricting the movement of the bobbin 10 in the direction (Y direction) in which the bobbin 10 is removed from the rotating shaft 23.

IPC 8 full level
B65H 49/20 (2006.01); **B65H 54/547** (2006.01); **B65H 67/04** (2006.01)

CPC (source: EP US)
B65H 49/26 (2013.01 - EP US); **B65H 49/36** (2013.01 - EP US); **B65H 67/02** (2013.01 - EP US)

Cited by
CN104401800A; CN102360636A; EP2489618A3

Designated contracting state (EPC)
IT

DOCDB simple family (publication)
EP 1950161 A1 20080730; **EP 1950161 A4 20091104**; US 2009057479 A1 20090305; WO 2007046359 A1 20070426

DOCDB simple family (application)
EP 06811875 A 20061017; JP 2006320620 W 20061017; US 8376806 A 20061017