

Title (en)
HINGE MECHANISM AND FURNITURE

Title (de)
SCHARNIERMECHANISMUS UND MÖBEL

Title (fr)
MÉCANISME DE CHARNIÈRE ET MEUBLE

Publication
EP 3406834 A4 20191127 (EN)

Application
EP 17878164 A 20170407

Priority
• CN 201611110693 A 20161206
• CN 2017079703 W 20170407

Abstract (en)
[origin: EP3406834A1] Provided are a hinge mechanism and furniture. The hinge mechanism includes a movable connector (2), a fixed connector (4), and a hinge assembly (6) connected between the movable connector (2) and the fixed connector (4) and configured for enabling the movable connector (2) to rotate relatively to the fixed connector (4). The hinge assembly (6) includes a hinge four-rod mechanism (100) using the fixed connector (4) as a rack; and a first extension part (802) served as an extension to a connecting rod (8) in the hinge four-rod mechanism (100) in a lengthwise direction of the connecting rod (8) and rotatably connected to the movable connector (2). With the hinge four-rod mechanism (100), the movable connector (2) can rotate and shift relatively to the fixed connector (4) during rotation, thereby ensuring that a relatively large extension amount and opening space are achieved when the movable connector (2) is opened relative to the fixed connector (4), and relatively good closeness and tightness are achieved when the movable connector (2) is closed up.

IPC 8 full level
E05D 11/00 (2006.01); **E05D 3/16** (2006.01); **E05F 1/12** (2006.01); **E05F 5/02** (2006.01)

CPC (source: CN EP KR)
A47B 95/00 (2013.01 - CN EP KR); **E05D 3/16** (2013.01 - EP KR); **E05D 5/0276** (2013.01 - KR); **E05D 11/00** (2013.01 - CN EP); **E05F 1/1261** (2013.01 - EP); **E05F 5/02** (2013.01 - EP); **A47B 2220/0072** (2013.01 - KR); **E05Y 2201/412** (2013.01 - EP); **E05Y 2201/424** (2013.01 - EP); **E05Y 2900/20** (2013.01 - EP KR)

Citation (search report)
• [X] DE 20306043 U1 20040826 - LIEBHERR HAUSGERÄTE [DE]
• [X] US 2003159249 A1 20030828 - TSUNG-LUNG LIN [TW]
• [XA] US 2010101052 A1 20100429 - WALTERMATE DIETER-HERMANN [DE], et al
• [XA] US 2013152339 A1 20130620 - HUNG I-TSUNG [TW]
• [XA] US 2008276422 A1 20081113 - BECKMANN WOLFGANG [DE], et al
• [E] EP 3548686 A1 20191009 - HETTICH ONI GMBH & CO KG [DE]
• See references of WO 2018103246A1

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 3406834 A1 20181128; **EP 3406834 A4 20191127**; **EP 3406834 B1 20230524**; CN 106545253 A 20170329; CN 106545253 B 20180525; KR 102145513 B1 20200819; KR 20180108729 A 20181004; WO 2018103246 A1 20180614

DOCDB simple family (application)
EP 17878164 A 20170407; CN 201611110693 A 20161206; CN 2017079703 W 20170407; KR 20187024698 A 20170407