

Title (en)
HINGE ASSEMBLY AND DOOR STRUCTURE

Title (de)
SCHARNIERMONTAGE UND TÜRSTRUKTUR

Title (fr)
ASSEMBLAGE DE LA CHARNIÈRE ET STRUCTURE DE LA PORTE

Publication
EP 4382703 A1 20240612 (EN)

Application
EP 23166644 A 20230404

Priority
CN 202211567402 A 20221207

Abstract (en)
The present invention discloses a hinge assembly and a door structure, relates to the technical field of hardware fittings, and solves the problem of how to improve the reliability and flexibility of door rotation. The technical solution is characterized by including: door frame shaft bases each having a first main shaft hole and a first guide slot; a joint base which is of a curved plate structure with shaft channels being arranged at two ends respectively and upper and lower end faces being provided with limit posts matching the first guide slot in the door frame shaft base, one of the shaft channels being rotatably connected to the first main shaft holes; hooks rotatably mounted to the upper and lower end faces of the joint base. The reliability and flexibility of the structure is improved through a two-phase door opening operation.

IPC 8 full level
E05D 3/12 (2006.01); **E05D 5/06** (2006.01)

CPC (source: EP)
E05D 3/12 (2013.01); **E05D 5/06** (2013.01); **E05Y 2201/22** (2013.01); **E05Y 2400/202** (2013.01); **E05Y 2400/31** (2013.01); **E05Y 2400/458** (2013.01); **E05Y 2400/502** (2013.01); **E05Y 2900/132** (2013.01)

Citation (search report)
• [XAI] EP 1834059 B1 20090304 - HAHN GMBH & CO KG DR [DE]
• [A] GB 2203483 A 19881019 - FORD MOTOR CO
• [A] DE 102008027219 B3 20090716 - SIMONSWERK GMBH [DE]

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 ME MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA

Designated validation state (EPC)
KH MA MD TN

DOCDB simple family (publication)
EP 4382703 A1 20240612; CN 115726644 A 20230303

DOCDB simple family (application)
EP 23166644 A 20230404; CN 202211567402 A 20221207