Title (en)

PAPER SHEET THICKNESS DETECTION APPARATUS, PAPER SHEET IDENTIFICATION APPARATUS, AND PAPER SHEET HANDLING APPARTUS

Title (de)

VORRICHTUNG ZUR BESTIMMUNG DER DICKE VON PAPIERBLÄTTERN, VORRICHTUNG ZUR IDENTIFIZIERUNG VON PAPIERBLÄTTERN UND VORRICHTUNG ZUR HANDHABUNG VON PAPIERBLÄTTERN

Title (fr)

APPAREIL DE DÉTECTION D'ÉPAISSEUR DE FEUILLE DE PAPIER, APPAREIL D'IDENTIFICATION DE FEUILLE DE PAPIER ET APPAREIL DE MANIPULATION DE FEUILLE DE PAPIER

Publication

EP 4239604 A1 20230906 (EN)

Application

EP 23157891 A 20230222

Priority

JP 2022032201 A 20220302

Abstract (en)

In a paper sheet thickness detection apparatus, precision of thickness detection of paper sheets is enhanced by suppressing vibration that occurs due to impact at a time of the paper sheets rushing in between a reference roller and a detection roller while ensuring maintainability. A paper sheet thickness detection apparatus detecting a thickness of a paper sheet includes a first unit including a reference roller, and a second unit including a detection roller that sandwiches the paper sheet with the reference roller to convey the paper sheet and displaces with respect to the reference roller according to a thickness of the paper sheet, and a thickness sensor that detects the thickness of the paper sheet based on a displacement amount of the detection roller. The first unit and the second unit are superposed such that the reference roller and the detection roller sandwich the paper sheet to form a conveyance path for the paper sheet, and are assembled to be openable and closable with a rotation axis provided on one end side of the conveyance path as a center. The second unit includes a vibration damping member on the thickness sensor.

IPC 8 full level

G07D 7/164 (2016.01)

CPC (source: CN EP)

G07D 7/164 (2013.01 - CN EP); **G07D 11/237** (2019.01 - CN); **G07F 19/209** (2013.01 - CN)

Citation (applicant)

JP 2014102719 A 20140605 - HITACHI OMRON TERMINAL SOLUTIONS CORP

Citation (search report)

- [XI] US 2005056575 A1 20050317 - LEE BYUNG-MOK [KR]
- [XI] US 4378109 A 19830329 - TAKAHASHI HISASHI [JP], et al

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)

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