

Title (en)
Sheet conveying device and image forming apparatus incorporating same

Title (de)
Blattfördervorrichtung und Bilderzeugungsvorrichtung damit

Title (fr)
Dispositif de transport de feuille et appareil de formation d'image l'incluant

Publication
EP 2330064 A2 20110608 (EN)

Application
EP 10192388 A 20101124

Priority
• JP 2009276481 A 20091204
• JP 2010251987 A 20101110

Abstract (en)
A sheet conveying device (1) includes a controller (19) that detects the uppermost sheet (2A), lifts and stops the sheet stack (2) at a reference position, and detects and stores the position. The controller (19) attracts and conveys the uppermost sheet (2A) for a given number of times with the second detector (16) contacting it at the reference position, and calculates a variation amount of the detected angle to convert to a thickness of M sheets, and stores the result. Then, the controller (19) retracts the driven contact roller (16D) to a non-detecting position, and, each time the uppermost sheet (2A) is attracted by N sheets, lifts the sheet stack (2) based on the thickness of M sheets under N #¥ XM ("M" and "N" represent positive integers and "X" represents a positive integer equal to or greater than 1).

IPC 8 full level
B65H 1/14 (2006.01); **B65H 3/12** (2006.01); **B65H 7/02** (2006.01)

CPC (source: EP)
B65H 1/14 (2013.01); **B65H 3/128** (2013.01); **B65H 7/02** (2013.01); **B65H 2511/13** (2013.01); **B65H 2511/212** (2013.01); **B65H 2511/22** (2013.01); **B65H 2511/30** (2013.01); **B65H 2553/61** (2013.01)

Citation (applicant)
• JP 2007045630 A 20070222 - RICOH PRINTING SYS LTD
• JP H11322101 A 19991124 - CANON KK
• JP H11322101 A 19991124 - CANON KK
• JP 2009276481 A 20091126 - CANON KK
• JP 2010251987 A 20101104 - TOSHIBA CORP

Cited by
CN106628857A

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

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EP 2330064 A2 20110608; **EP 2330064 A3 20130710**; **EP 2330064 B1 20150603**

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