

Title (en)  
DEVICE FOR UNITING TWO STACKS OF SHEETS

Publication  
**EP 0286868 A3 19900110 (DE)**

Application  
**EP 88104405 A 19880319**

Priority  
DE 3712387 A 19870411

Abstract (en)  
[origin: US4858904A] The invention relates to a device for combining partial piles of book pages by laying one on another. The partial piles may be brought up alternately in an inclined position on a conveying chain. According to the invention, there is provided above the conveying chain a rotary rearranging apparatus. The rearranging apparatus carries a plurality of gripping systems each adapted to pick up one partial pile of book pages and, after rotation of the rearrangement apparatus through a 360 degree revolution, deposits the partial pile of book pages beside an identical succeeding partial pile. During the 360 degree revolution of the rearranging apparatus, each gripping system is rotated about an axis parallel to the rotational axis of the rearranging apparatus such that the gripper systems continuously remain in an upright orientation with the grippers always projecting downwards at the lowest point of the gripping system. Before combination of any given partial pile of book pages with another partial pile, every such given partial pile may be rotated by the respective gripper system through 180 degrees about an axis extending at 90 degrees to the normal of the plane of the partial pile, and for this purpose every gripping system of the rearrangement apparatus is mounted so as to be rotatable about a vertical axis and, in a part of its orbital path of motion during the 360 degree revolution of the rearranging apparatus, is rotated through 180 degrees about this vertical axis.

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CPC (source: EP US)  
**B42C 19/08** (2013.01 - EP US)

Citation (search report)  
• [A] US 4025065 A 19770524 - TIMSON ERNEST ARTHUR  
• [A] US 4471955 A 19840918 - BRADLEY JOHN J [US], et al  
• [A] FR 2549026 A1 19850118 - ROLAND MAN DRUCKMASCH [DE]

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AT BE CH ES FR GB GR IT LI LU NL SE

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**US 4858904 A 19890822**; AT E76365 T1 19920615; CA 1303801 C 19920623; CS 241888 A3 19920318; CS 276898 B6 19920916; DD 268456 A5 19890531; DE 3712387 A1 19881027; DE 3712387 C2 19890706; EP 0286868 A2 19881019; EP 0286868 A3 19900110; EP 0286868 B1 19920520; JP H0620968 B2 19940323; JP S63267659 A 19881104

DOCDB simple family (application)  
**US 18029288 A 19880411**; AT 88104405 T 19880319; CA 563820 A 19880411; CS 241888 A 19880408; DD 31451388 A 19880407; DE 3712387 A 19870411; EP 88104405 A 19880319; JP 8742188 A 19880411