

## Title (en)

Integral disk type inverter-stapler and stapler.

## Title (de)

Integrierter Schaufelrad-Blattwender-Stapler und Heftvorrichtung.

## Title (fr)

Dispositif de retournement et d'empilage à disque avec une agrafeuse intégrée.

## Publication

**EP 0673868 A3 19960207 (EN)**

## Application

**EP 95301803 A 19950317**

## Priority

- US 21452594 A 19940318
- US 21452194 A 19940318

## Abstract (en)

[origin: EP0673868A2] A sheet inverting and stacking system in which a rotatable sheet stacking unit (52) receives the lead edge area of an incoming sheet (11) and then rotates and releases that lead edge area of the sheet at a lead edge registration position for stacking the sheet inverted in a set of stacked sheets at least partially on a stacking tray (32) in a stacking area; with a movable sheet registration system (16) providing plural sheet lead edge registration positions (12, 14); a sheet set fastening system (20) (stapler) for fastening the stacked sets; a first registration position (12) for set fastening in which the sheet stacking area extends into the sheet set fastening system and a second registration position (14) in which the sheet stacking is in front of the sheet fastening system, to provide two different initial sheet leading edge stacking positions and one final stacking position. The rotatable sheet stacking unit (52) is interdigitating with the movable registration system to carry the sheet lead edge directly into the first or second registration positions and also into the sheet fastening system in the first registration position. The stapler (20) is under and at least partially inside of the rotatable sheet stacking unit, and the rotatable sheet stacking unit slots (54) carry the lead edge area of the incoming sheet directly up to the first registration position and into the stapler before releasing it. The sheet lead edge retaining slots have low force retaining spring members (50) which lightly hold the lead edge of the sheet against one side of the slot. A bail system (60) is actuated in coordination with rotation of the rotatable sheet stacking unit (52) to operate a tamper arm (62) which moves downwardly the lead edge area of a sheet (11) being released at the registration position. <IMAGE>

## IPC 1-7

**B65H 29/40**

## IPC 8 full level

**B42C 1/12** (2006.01); **B65H 29/40** (2006.01)

## CPC (source: EP)

**B42C 1/12** (2013.01); **B65H 29/40** (2013.01); **B65H 2301/163** (2013.01); **B65H 2301/4212** (2013.01); **B65H 2404/651** (2013.01)

## Citation (search report)

- [A] US 5201517 A 19930413 - STEMMLE DENIS J [US]
- [DA] US 5114135 A 19920519 - EVANGELISTA DONATO D [US], et al
- [A] EP 0407763 A1 19910116 - FERAG AG [CH]
- [A] EP 0528126 A1 19930224 - WINDMOELLER & HOELSCHER [DE]
- [A] US 5098080 A 19920324 - ARNONE STEPHEN C [US], et al
- [A] PATENT ABSTRACTS OF JAPAN vol. 10, no. 320 (M - 530)<2376> 30 October 1986 (1986-10-30)
- [DA] BRUCE J. PARKS: "process direction offsetting of sheets on a stack", XEROX DISCLOSURE JOURNAL, vol. 18, no. 3, 1 May 1993 (1993-05-01) - 1 June 1993 (1993-06-01), pages 289 - 292, XP000368602

## Cited by

DE102004016109A1; ES2169616A1; EP0924573A1; US6152445A; US8844920B1; US7731185B2; WO2007017182A1; US7887035B2; US8424875B2; WO2006002144A1; WO2005019077A1

## Designated contracting state (EPC)

DE ES FR GB IT

## DOCDB simple family (publication)

**EP 0673868 A2 19950927; EP 0673868 A3 19960207; EP 0673868 B1 19990120**; BR 9501119 A 19951226; DE 69507354 D1 19990304; DE 69507354 T2 19990617; ES 2126213 T3 19990316

## DOCDB simple family (application)

**EP 95301803 A 19950317**; BR 9501119 A 19950317; DE 69507354 T 19950317; ES 95301803 T 19950317