

Title (en)  
PAPER SORTING SYSTEM

Title (de)  
PAPIERSORTIERSYSTEM

Title (fr)  
SYSTEME DE TRIAGE DU PAPIER

Publication  
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Application  
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Abstract (en)  
[origin: WO0066465A9] The present invention includes devices and methods for handling and sorting paper. Devices for accelerating and spreading paper from a paper input (14) to a sensor (23) are disclosed. Operably thin layers of paper are passed through a sensor at cost effective feed rates. One embodiment of the invention includes a spreader (24) positioned to receive paper (12) from the input and an inclined feed section (18) downstream of the spreader. The inclined feed section includes first and second inclined conveyors (50, 52) to further accelerate and spread the paper. A feed accelerator (84) is operably positioned to receive paper from the second inclined conveyor. The feed accelerator further accelerates and separates the paper. The feed accelerator feeds the paper to the sensor which is operably connected to an ejector (92) downstream of the sensor. Targeted paper is ejected from the paper stream and product paper continues downstream to a product conveyor (102).

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Citation (search report)

- [XA] US 5675416 A 19971007 - CAMPBELL DUNCAN B [US], et al
- [A] US 5333797 A 19940802 - BECKER JOHN C [US], et al
- [A] US 5024335 A 19910618 - LUNDELL VERNON J [US]
- [A] DE 4322324 A1 19950112 - HEIDELBERGER DRUCKMASCH AG [DE]
- [A] US 3747755 A 19730724 - SENTURIA S, et al

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