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(72) Inventor: **Prittie, Allan R.**
Islington Ontario M9A 3Z9 (CA)

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(74) Representative: **Hamilton, Alistair et al**
Mewburn Ellis,
York House,
23 Kingsway
London WC2B 6HP (GB)

(71) Applicant: **Prittie, Allan R.**
Islington Ontario M9A 3Z9 (CA)

(54) **Method and apparatus for removing waste windows from web carton material**

(57) A method and apparatus are provided for removing waste die-cut windows from continuously moving carton board web material. A pair of juxtaposed parallel cylinders (12, 16) with their axes disposed transverse to the direction of web movement accept the moving web and knock-out the die-cut windows by virtue of a protuberance (20) on one cylinder mating with a re-

cess (22) on the other, the protuberances and recesses matching each other and also matching the position of the die-cut window. In a variant, the non-male cylinder has an outer layer of substantially uniform thickness and is made of resilient polymeric material adapted to be elastically distorted sufficiently to receive the outward protrusion along with the waste window.

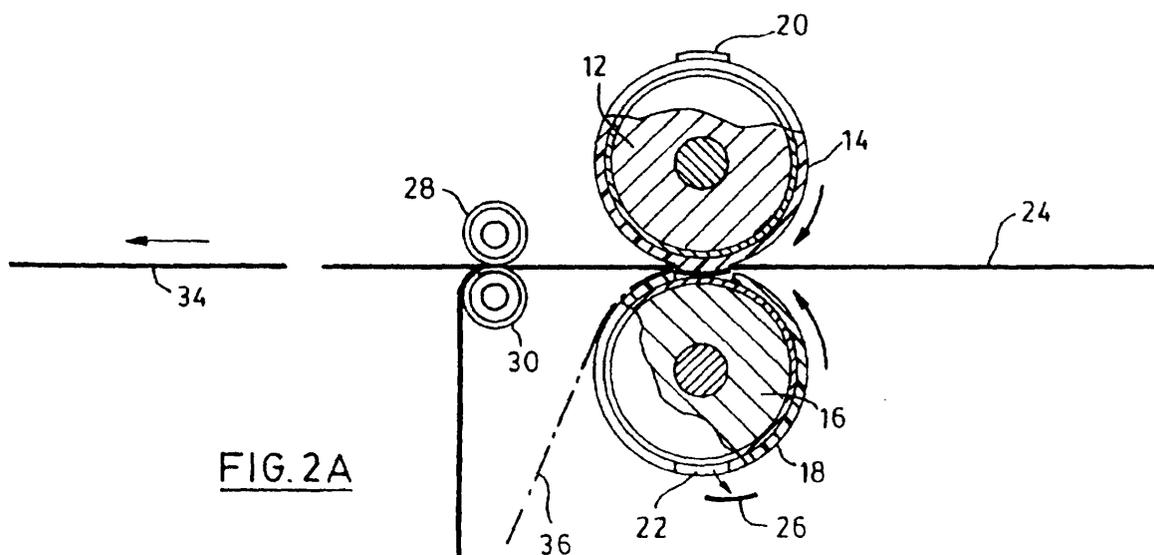


FIG. 2A



European Patent
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EUROPEAN SEARCH REPORT

Application Number
EP 98 30 3745

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The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
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X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

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ANNEX TO THE EUROPEAN SEARCH REPORT
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