

Title (en)
SUCTION CUP GRIPPING HEAD FOR THE OPENING OF A PAPER OR CARDBOARD TRAY AND RELATIVE METHOD OF OPENING A TRAY

Title (de)
SAUGNAPFGREIFER ZUM DEMONTIEREN VON EINER UMVERPACKUNG AUS PAPIER ODER KARTON UND VERFAHREN ZUM DEMONTIEREN EINER UMVERPACKUNG

Title (fr)
VENTOUSE DE PRÉHENSION POUR DÉMONTER UN EMBALLAGE EN PAPIER OU CARTON ET PROCÉDÉ DE DÉMONTAGE D'UN EMBALLAGE

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Abstract (en)
A suction cup gripping head for the opening of a paper or cardboard tray identifying a quadrilateral perimeter of adjustable size comprises four gripper elements (43) placed in pairs at the ends of two opposite sides of the perimeter, associable with pairs of opposite glued flaps, outer and inner, (111A, 111'A) of the tray (111), in which each gripper element (43) is equipped with a first set of inner suction cups (44) that are engageable from the inside against the inner glued flap (111'A) of the tray, and a tear device that is engageable from the outside against the outer glued flap (111A) of the tray, in which the tear device is applied to an arm (46) tilting about a fulcrum (47) adapted to detach the outer glued flap (111A) of the tray with its own rotary movement. The relative method for opening a paper or cardboard tray is also part of the invention.

IPC 8 full level
B65B 69/00 (2006.01)

CPC (source: EP)
B65B 69/00 (2013.01); **B65B 43/305** (2013.01)

Citation (search report)
• [A] JP S63307035 A 19881214 - TOKYO AUTOMATIC MACH WORKS, et al
• [A] EP 1103468 A1 20010530 - HERMANN MUELLER KUNSTSTOFFTECH [DE]
• [A] FR 2105455 A5 19720428 - ALEXANDRE PIERRE
• [A] JP S57142829 A 19820903 - LION CORP

Cited by
CN109249472A

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