

Title (en)  
APPARATUS AND METHOD FOR PACKAGING BOX FLATS

Publication  
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Application  
**EP 84309009 A 19841221**

Priority  
US 58364084 A 19840227

Abstract (en)  
[origin: EP0154093A2] An apparatus and method by which a single operator, at a single station (45) can pack pre-counted slugs (25, 26) of flat folded cartons, or trays (23) in one or more layers, in corrugated cases (27) for discharge to a case taper (183) several times faster than with manual packing by several operators. The "flats" (23) are advanced in a longitudinal path (31) on a secondary apron (28) of a stacker (21), erect on one edge (37), pre-counted and divided into slugs (25, 26), so that the single operator can slide each slug (25,26) longitudinally past a one-way back stop (46) onto a transfer table (47). The slug (25, 26) may be turned on its longitudinal axis by the operator for inspection and then compressed longitudinally by a ram (73,74) against the back stop (46). The operator has already been presented with a single, flat, tubular case (27), from a stack (97) of such cases, with the leading flaps (147) folded back, and has manually erected the case (27) and inserted it in a case gripper (107) preferably poised above the table (47), thereby closing the minor bottom closure flaps (143, 144). A start button (138) brings the case gripper (107) down to the level (70) of the transfer table (47) so that the operator can push the compressed slug (25, 26) laterally into the open case (119), resting on its side wall in the case gripper (107). The case (119) is automatically lowered to receive the next slug (26) and when full, is turned on a longitudinal axis through 90 DEG onto its bottom and discharged to a case taper (183) while the case gripper (107) returns to its original position above the level (70) of the transfer table (47).

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IPC 8 full level  
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Cited by  
US5280694A; DE3641859A1; CN115416895A; US5873693A; FR2684069A1; EP3590850A1; WO9200908A1; WO2011117902A1;  
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