

Title (en)

Process and apparatus for packaging stacks of flat objects

Title (de)

VERFAHREN UND VORRICHTUNG ZUM VERPACKEN VON STAPELN VON FLACHEN GEGENSTÄNDEN

Title (fr)

Procédé et appareil pour emballer des piles d'objets plats

Publication

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Application

EP 99830603 A 19990923

Priority

IT MO980214 A 19981015

Abstract (en)

A process and apparatus for packaging packs (2) of flat objects (3) piled one on top of another, using a package (1) formed by two cardboard half-blanks (4), in which the packs and the half-blanks (4) are supplied to a packaging station (7) in which the half-blanks (4) are arranged on two opposite flanks of a pack. Four operative units (10), each acting on a corner of a pack, are provided with gripping organs (11) which are moved in directions according to diagonals of the pack (2) of objects (3), nearing and distancing from the corners of the pack (2). The operative units (10) fold the half-blanks (4) so as to envelop the flanks of the pack (2), as well as a peripheral zone of a topmost and bottom-most face of the pack (2). The invention is particularly applicable to packs made of ceramic tiles stacked one on top of another. <IMAGE>

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CPC (source: EP)

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Citation (search report)

- [A] EP 0216235 A1 19870401 - GOMES SPA [IT]
- [A] US 3315435 A 19670425 - GUNYOU JOHN C

Cited by

CN104150043A; ITBO20120168A1; ITUB20153755A1; EP2952437A1; EP1340682A1; CN110422366A; CN105015826A; CN116812227A; CN106184876A; CN109229515A; CN110127106A; CN113226935A; CN102530318A; CN110127105A; ITMO20130063A1; CN106114959A; CN104290953A; CN108698719A; ITUB20161231A1; RU2731500C2; ITBO20120266A1; CN104245297A; CN106864889A; CN113071751A; CN107323717A; CN108454936A; CN110562521A; WO2017149422A1; WO2013144805A1; WO2013171680A1; US10974854B2; WO2017051274A1; WO2024005363A1

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