

Title (en)  
MANUFACTURING MACHINE AND MANUFACTURING METHOD FOR THE PRODUCTION OF DISPOSABLE CARTRIDGES

Title (de)  
HERSTELLUNGSMASCHINE UND VERFAHREN ZUR HERSTELLUNG VON EINWEGKARTUSCHEN

Title (fr)  
MACHINE DE FABRICATION ET PROCÉDÉ DE FABRICATION POUR LA PRODUCTION DE CARTOUCHES JETABLES

Publication  
**EP 3822179 B1 20220824 (EN)**

Application  
**EP 20208470 A 20201118**

Priority  
IT 201900021381 A 20191118

Abstract (en)  
[origin: EP3822179A1] A manufacturing machine (9) and manufacturing method for the production of disposable cartridges (1). Each disposable cartridge (1) has a tubular casing (2) provided with an upper wall (6) which is kept still by a plurality of bent locking teeth (8), and a quantity (4) of product housed in the tubular casing (2). The following are provided: a manufacturing conveyor (14), which supports at least one group (16) of seats (17), each designed to house a corresponding tubular casing (2); a feeding unit (21), which is designed to couple a plurality of upper walls (6) to respective tubular casings (2) housed in the group (16) of seats (17) while the corresponding locking teeth (8) are straight; and a closing system, which is designed to bend the locking teeth (8) against the corresponding upper walls (6) in the tubular casings (2) housed in the group (16) of seats (17). The closing system has: a first bending unit (22) which, for each tubular casing (2), partially bends the locking teeth (8) towards the upper wall (6), keeping the locking teeth (8) separate from the upper wall (6); and a second bending unit (23), which is separate from and independent of the first bending unit (22), is arranged downstream of the first bending unit (22) relative to the feeding direction of the manufacturing conveyor (14) and, for each tubular casing (2), completely bends the locking teeth (8) against the upper wall (6), resting the locking teeth (8) against the upper wall (6) .

IPC 8 full level  
**B65B 7/28** (2006.01); **A24F 40/70** (2020.01)

CPC (source: EP)  
**B65B 7/2892** (2013.01); **A24F 40/70** (2020.01); **B65B 51/32** (2013.01); **B65B 2220/24** (2013.01)

Citation (opposition)  
Opponent : Focke & Co.(GmbH & Co. KG)  
EP 3917842 A2 20211208 - BRITISH AMERICAN TOBACCO INVESTMENTS LTD [GB]

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)  
**EP 3822179 A1 20210519**; **EP 3822179 B1 20220824**; IT 201900021381 A1 20210518; PL 3822179 T3 20221219

DOCDB simple family (application)  
**EP 20208470 A 20201118**; IT 201900021381 A 20191118; PL 20208470 T 20201118