

Title (en)

MACHINE FOR SHAPING FLEXIBLE MATERIALS, WITH OR WITHOUT PREDETERMINED ALTERNATIONS OF FLUTES AND FLAT SPACES, AND PRODUCT SO OBTAINED

Publication

EP 0055160 B1 19851002 (FR)

Application

EP 81401915 A 19811202

Priority

FR 8027140 A 19801219

Abstract (en)

[origin: EP0055160A1] 1. Machine intended for shaping sheets of flexible material with or without alternations of waves and flat zones which can be predetermined as required, comprising essentially, in one or several frames, a first shaft (1) carried by fixed bearings and a second shaft (2) parallel to the first one, but carried by bearings mounted on slides enabling it to be moved towards or away from the latter, the two abovementioned shafts (1, 2) being driven in synchronised rotation in opposite directions and having, in the region of their ends, star-shaped flanges on the arms of which wave-making bars (3) are fixed, the said wave-making bars being parallel to the said shafts and being able to rotate about themselves, thus forming two stars, the arms of which, being mutually offset from one shaft to the other in a symmetrical manner, enable the wave-making bars which they carry to mesh more or less in accordance with the variable spacing of the shafts, and, where appropriate, two continuous belts or rubber sleeves arranged so as to clamp between them the sheet or plate of material to be shaped and bring it to the point of maximum interpenetration of the bars, characterised in that it comprises a first shaft (1) which has star-shaped flanges with n arms and n wave-making bars (3), a second shaft (2) which has star-shaped flanges with n' arms and n' wave-making bars, all of them being removable and operated, partially or entirely, in accordance with the shape of the sheet to be made, as well as a third shaft (4) which is parallel to the first and second shafts and is driven in synchronised rotation with the second shaft and in the same direction as the latter and which has, in the region of its ends, star-shaped flanges with pn' arms, p being a whole number, on which wave-making bars are fixed, which bars are removable, are able to rotate about themselves, are parallel to this shaft and are operated in an order adapted to the pattern which is required to be given to the shape, it being possible, moreover, if required, for all the wave-making bars of this third shaft to be surrounded by a continuous belt or flexible sleeve, the said third shaft being downstream of the other two shafts and being arranged so as to co-operate with the bars of a roller conveyor belt (5) so as to form the shapes of the material to be shaped.

IPC 1-7

B31F 1/29

IPC 8 full level

B31F 1/30 (2006.01)

CPC (source: EP)

B31F 1/30 (2013.01)

Cited by

FR2637633A1; EP2617894A1; FR2986014A1; CN103216047A

Designated contracting state (EPC)

DE GB

DOCDB simple family (publication)

EP 0055160 A1 19820630; EP 0055160 B1 19851002; DE 3172555 D1 19851107; FR 2496551 A1 19820625; FR 2496551 B1 19880129; OA 06969 A 19830731

DOCDB simple family (application)

EP 81401915 A 19811202; DE 3172555 T 19811202; FR 8027140 A 19801219; OA 57569 A 19811219