

Title (en)
HIGH SPEED FOLDING MACHINE FOR ELASTIC MATERIAL BANDS

Publication
EP 0368392 B1 19930414 (EN)

Application
EP 89202744 A 19891031

Priority
IT 2253688 A 19881107

Abstract (en)
[origin: EP0368392A2] Machine for high speed folding in accordion-like manner bands (102) of elastic materials such as paper, thin plastic laminates or metal sheets coming from coils on which they are stored in a rolled up form, comprising an orientable guide (104) launching said band (102) against an obstacle (24, 26) so as to cause a length of said band (102) to be bent in arc-shaped manner, thus forming a loop (150), towards a first roller (20) having circumferential grooves (40) and areas (136, 138, 140) having high friction coefficient with respect to the material of the band (102) to be folded, said roller (20) being rotated at a speed such that its peripheral speed is greater than the advancing rate of said band (102), whereby the loop (150) formed by said band (102) is drawn by said roller (20) up to impinge against relieves (32) engaged within said circumferential grooves (40), causing said band (102) to be pinched, thus forming a sharp fold and then to start again the arc shaped folding in the opposite direction until it comes into contact with said loop (150) a second roller (22), fully identical to the first one (20), whereby the band (102) is pinched between said roller (22) and corresponding relieves (36) engaged in circumferential grooves thereof (44), the band (102) being thus sharply folded again and returned towards said first roller (20), and so on, whereby an accordion folded package of band (166) is formed up to the desired size. The presence of possible crossing weakening areas in said band (102) at regular spacings makes the size of the accordion folded zones essentially independent from the distance between said first and second rollers (20, 22).

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