

Title (en)
U-SHAPED STAPLE AND DEVICE FOR CLOSING BAGS AND TUBES

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Application
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Abstract (en)
[origin: WO9007459A1] U-shaped staples for closing bags and tubes in continuous strips comprise a base (7) and two branches (4) whose ends are bent outwards to form a connecting bridge (2) which can be detached from the individual staples in a strip (1) of staples. Damage to the closed package and other packages can be caused by burrs which are formed when the individual staples are detached from the strip (1) and which project beyond the width of the staple. To resolve this problem, the strip of staples has an approximately parallel-sided section (3) in the region of the ends (6) of the branches, which is narrower than the strip. The regions of the ends (6) of the branches, which are bent outward, therefore rest uniformly against the outer sides of the branches (4), within the width of the strip, without burrs which project beyond the width of the strip. A device for closing bags and tubes by means of these staples has a closing punch (9) which co-operates with a die (8). The effective surface (29) of the punch has a groove (10) whose width is equal to that of the staple and whose depth is less than the total thickness of the branch involved in the closing process. During the closing process, the side walls of the groove (10) guide the ends (6) of the branches and ensure that the ends (6) of the branches of the staples are pressed against the outside of the branches (4) of the staples without forming burrs.

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