

Title (en)

Device for forming beads and water folds on eaves gutter corners.

Title (de)

Vorrichtung zur Herstellung der Wülste und Wasserfalze an Dachrinnenwinkeln.

Title (fr)

Dispositif pour la fabrication de bourrelets et d'agrafages aux angles de gouttières.

Publication

**EP 0103318 A1 19840321 (DE)**

Application

**EP 83201151 A 19830803**

Priority

DE 3233800 A 19820911

Abstract (en)

1. Apparatus for forming the beads (23, 23', 51, 51') and water-retaining folds (24, 24', 52, 52') by automatically curling and bending of the protruding, trimmed, free longitudinal edge portions (2, 2', 3, 3', 28, 28', 29, 29') on deepdrawn blanks (1, 27) for one-part gutter angles having side walls which are shaped like arcs of a circle adjacent to the corner joint between the abutting gutter angle members, characterized by a) a lower die having aa) a stationary lower die member (5, 31), which conforms to the exterior profile of the blank (1, 27) ; ab) a raising die member (13, 38), which is adapted to be raised and lowered and disposed on that side on which the water-retaining folds (24, 24', 52, 52') are to be formed. b) an upper die having ba) an upper die member (8, 33), which is adapted to be raised and lowered and conforms to the interior profile of the blank and is adapted to be clamped against the lower die member ; bb) a backing bar (10, 35) , which is adapted to be raised and lowered and disposed in a recess (1, 36) of the upper die member on the side on which the water-retaining fold is to be formed ; c) respective curling rods (20, 20', 48, 48'), which are longitudinally and transversely displaceable and are rotatable and adapted to be slidably fitted on the edges of those free longitudinal edge portions (2, 2', 29, 29') which are intended to form beads (23, 23', 51, 51') ; and d) respective bending rods (21, 21', 47, 47'), which are longitudinally displaceable and rotatable and adapted to be slidably fitted onto the edges of those free longitudinal edge portions (3, 3', 28, 28') which are intended to form the water-retaining folds (3, 3', 28, 28').

Abstract (de)

Bei einem Verfahren zur Herstellung der Wülste und Wasserfalze an durch Tiefziehen geformten Rohlingen (1) für einteilige Dachrinnenwinkel werden zur Verringerung des Aufwandes die freien, überstehenden, besäumten Längsrandbereiche (2,3) der Rohlinge zu Wülsten und Wasserfalzen automatisch gewickelt bzw. gebogen.

IPC 1-7

**B21D 19/12**

IPC 8 full level

**B21D 19/12** (2006.01)

CPC (source: EP)

**B21D 19/12** (2013.01)

Citation (search report)

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Designated contracting state (EPC)

AT BE CH DE FR GB IT LI LU NL SE

DOCDB simple family (publication)

**EP 0103318 A1 19840321; EP 0103318 B1 19861120**; AT E23682 T1 19861215; DE 3233800 A1 19840315; DE 3367743 D1 19870108; DK 161942 B 19910902; DK 161942 C 19920203; DK 410883 A 19840312; DK 410883 D0 19830909; FI 80619 B 19900330; FI 80619 C 19900710; FI 833121 A0 19830901; FI 833121 A 19840312; IE 54448 B1 19891011; IE 831845 L 19840311; NO 833034 L 19840312; YU 183783 A 19871031

DOCDB simple family (application)

**EP 83201151 A 19830803**; AT 83201151 T 19830803; DE 3233800 A 19820911; DE 3367743 T 19830803; DK 410883 A 19830909; FI 833121 A 19830901; IE 184583 A 19830804; NO 833034 A 19830823; YU 183783 A 19830912