

Title (en)

METHOD AND DEVICE FOR THE MANUFACTURE OF BEVEL WHEELS

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Application

EP 80102324 A 19800430

Priority

DE 2927135 A 19790705

Abstract (en)

[origin: US4590782A] A bevel gear is made by means of a die, a punch, and two concentric counterpunches, one having a particularly contoured extension. A cylindrical blank, having a diameter not larger than the smallest bevel gear root circle, is inserted in the die; a portion is held by one counterpunch but reverse-extruded in part into the gap between that counterpunch and the advancing punch. A portion of the blank inserted into the interior of the die flows concurrently radially into the small-diameter portion of the die cavity. Subsequently, the reverse-extruded, tubular portion is forced back in parts by the second counterpunch, acting in the gap, to fill the large-diameter portion of the cavity. A tubular shaft extension may remain on the gear.

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