

Title (en)
APPARATUS AND METHOD FOR FORMING SHAPE OF METAL FOIL PRODUCTS WITH WRINKLELESS SURFACE

Title (de)
VORRICHTUNG UND VERFAHREN ZUR HERSTELLUNG VON METALLFOLIEN MIT FALTENFREIER OBERFLÄCHE

Title (fr)
APPAREIL ET PROCÉDÉ DE FORMATION D'UNE FORME DE PRODUITS EN FEUILLE MÉTALLIQUE PRÉSENTANT UNE SURFACE SANS PLIS

Publication
EP 4255652 A4 20240110 (EN)

Application
EP 20963972 A 20201204

Priority
CN 2020133770 W 20201204

Abstract (en)
[origin: WO2022116126A1] The present disclosure provides an apparatus (100) and a method for forming a shape of a metal foil (250) product from a blank. The apparatus (100) comprises a forming tool (110) comprising a die (210), a punch (220) and a pressing plate (230). The punch (220) comprises a channel (222) located within the punch (220) and having an inlet (223) and an outlet (224), the outlet (224) is located on the forming surface for allowing a fluid to be injected into an enclosed space (354) created by at least the punch (220) and the central portion (252) of the blank for filling the enclosed space (354) to develop a hydraulic pressure (355) for pushing the central portion (252) of the blank into the die cavity (211) of the die (210) for forming the shape of the product, thereby forming the product with smooth surface and without cracks and wrinkles.

IPC 8 full level
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CPC (source: EP)
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Citation (search report)

- [X] CN 102896195 A 20130130 - HUANG QIRUI
- [X] GB 2131334 A 19840620 - METAL BOX PLC
- [X] JP S554818 U 19800112
- [X] CN 107745029 A 20180302 - SHANGHAI AEROSPACE EQUIPMENT MFG GENERAL FACTORY
- See also references of WO 2022116126A1

Designated contracting state (EPC)
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CN 2020133770 W 20201204; CN 202080108365 A 20201204; EP 20963972 A 20201204