Title (en)

ROLL FORMING SYSTEM FOR FORMING A VARIABLE THICKNESS BLANK AND METHOD FOR FORMING A VARIABLE THICKNESS BLANK

Title (de)

WALZANLAGE ZUR HERSTELLUNG EINES ROHLINGS MIT VARIABLER DICKE UND VERFAHREN ZUR HERSTELLUNG EINES ROHLINGS MIT VARIABLER DICKE

Title (fr)

LAMINOIR POUR FORMER UNE ÉBAUCHE D'ÉPAISSEUR VARIABLE ET PROCÉDÉ DE FORMATION D'UNE ÉBAUCHE D'ÉPAISSEUR VARIABLE

Publication

EP 3421147 B1 20220727 (EN)

Application

EP 18174346 A 20180525

Priority

US 201715639501 A 20170630

Abstract (en)

[origin: EP3421147A1] The present disclosure relates to a roll forming system (10) for forming a variable thickness blank and to a method for forming a variable thickness blank. The roll forming system includes at least two sets of cylindrical shaped rollers. Each of the sets of rollers include: a first roller (38) including a face (42) which is linear where the first roller contacts the metal sheet; and a second roller (40) including multiple shaping faces positioned about a perimeter and directed toward the face (42) of the first roller. Each roller set incrementally alters a thickness of a metal sheet (12) in a direction transverse to a metal sheet feed direction when the metal sheet is passed between the first and second rollers. The metal sheet after passing between the first and second rollers forms a roll formed blank (25) having a first portion and a second portion positioned in the direction transverse to the feed direction with respect to the first portion, the first portion thicker than the second portion.

IPC 8 full level

B21B 1/08 (2006.01); **B21B 1/22** (2006.01); **B21B 37/26** (2006.01); B21H 8/00 (2006.01)

CPC (source: CN EP US)

B21B 1/0805 (2013.01 - EP US); **B21B 1/12** (2013.01 - US); **B21B 1/22** (2013.01 - CN); **B21B 1/38** (2013.01 - US); **B21B 27/02** (2013.01 - CN); **B21B 27/028** (2013.01 - US); **B21B 37/26** (2013.01 - CN); **B21B 39/082** (2013.01 - US); B21H 8/00 (2013.01 - EP US)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

EP 3421147 A1 20190102; **EP 3421147 B1 20220727**; CN 109201733 A 20190115; US 2019001382 A1 20190103

DOCDB simple family (application)

EP 18174346 A 20180525; CN 201810539595 A 20180530; US 201715639501 A 20170630