

Title (en)  
SHEET SHEARING METHOD

Title (de)  
SCHERVERFAHREN FÜR BLECH

Title (fr)  
PROCÉDÉ DE CISAILLEMENT DE TÔLE

Publication  
**EP 2327488 B1 20130213 (EN)**

Application  
**EP 09803056 A 20090731**

Priority  
• JP 2009063694 W 20090731  
• JP 2008198260 A 20080731

Abstract (en)  
[origin: EP2327488A1] Provided is a method of shearing a thin plate with high quality without a need for narrowing a clearance by precision machining. The method comprises: placing a thin plate (1) having at least one non-metal layer (1b), between a punch (3) and a die (2) having a shearing hole (2a); and relatively moving the punch (3) toward and with respect to the shearing hole (2a) to thereby shear the thin plate (1), wherein the relative movement of the punch (3) is stopped to complete the shearing, before the punch (3) penetrates through the thin plate (1) and becomes fitted into the shearing hole (2a).

IPC 8 full level  
**B21D 28/02** (2006.01); **B21D 28/12** (2006.01)

CPC (source: EP KR US)  
**B21D 28/02** (2013.01 - EP KR US); **B21D 28/12** (2013.01 - KR); **B21D 28/26** (2013.01 - EP US); **B21D 28/36** (2013.01 - EP US); **B26F 1/02** (2013.01 - EP US); **B26F 1/44** (2013.01 - EP US); **B26F 1/24** (2013.01 - EP US); **B26F 1/384** (2013.01 - EP US); **B26F 1/40** (2013.01 - EP US); **B26F 2001/4436** (2013.01 - EP US); **B26F 2001/449** (2013.01 - EP US); **Y10T 83/04** (2015.04 - EP US); **Y10T 83/0476** (2015.04 - EP US)

Designated contracting state (EPC)  
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 SE SI SK SM TR

DOCDB simple family (publication)  
**EP 2327488 A1 20110601**; **EP 2327488 A4 20120307**; **EP 2327488 B1 20130213**; CN 102112249 A 20110629; JP 5336490 B2 20131106; JP WO2010013818 A1 20120112; KR 101636414 B1 20160705; KR 20110052638 A 20110518; US 2011174125 A1 20110721; WO 2010013818 A1 20100204

DOCDB simple family (application)  
**EP 09803056 A 20090731**; CN 200980129473 A 20090731; JP 2009063694 W 20090731; JP 2010522767 A 20090731; KR 20117003818 A 20090731; US 200913056739 A 20090731