

Title (en)  
Blind rivet fastening device

Title (de)  
Blindnietbefestigungsvorrichtung

Title (fr)  
Dispositif de fixation de rivets aveugles

Publication  
**EP 2502686 A1 20120926 (EN)**

Application  
**EP 12160507 A 20120321**

Priority  
JP 2011063624 A 20110323

Abstract (en)  
A steel ball (11) is housed in a hole (10) extending from the inner wall of the nose piece (3) towards the outer wall and rearward obliquely with respect to a rivet insertion port (6). An elastic ring (12) pushes the steel ball (11) from the outer wall toward the inner wall so that a portion of the steel ball (11) protrudes into the port (6) and holds the mandrel (5). Because the hole (10) extends rearward obliquely with respect to the port (6), the steel ball (11) can move easily when the mandrel (5) travels in the insertion direction but has difficulty moving when the mandrel (5) travels in the opposite direction. As a result, the steel ball (11) keeps the mandrel (5) from sticking out of the nose piece (3) after fastening of a blind rivet (4), makes it easy to insert a new blind rivet in the nose piece (3), and keeps the inserted blind rivet from falling out before being fastened.

IPC 8 full level  
**B21J 15/04** (2006.01); **B21J 15/10** (2006.01)

CPC (source: EP US)  
**B21J 15/043** (2013.01 - EP US); **B21J 15/105** (2013.01 - EP US); **Y10T 29/5373** (2015.01 - EP US)

Citation (applicant)  
• JP H06262290 A 19940920 - OPUTO ENG KK  
• JP 2008168324 A 20080724 - NAKABOHTEC CORROSION PROTECT  
• JP S5538603 U 19800312

Citation (search report)  
• [XY] US 4375760 A 19830308 - SAVAGE DONALD S [GB], et al  
• [Y] US 751345 A 19040202

Cited by  
DE102018129118A1; EP3838438A1

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

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**EP 2502686 A1 20120926**; CN 102688973 A 20120926; JP 2012196702 A 20121018; TW 201244848 A 20121116; US 2012240371 A1 20120927

DOCDB simple family (application)  
**EP 12160507 A 20120321**; CN 201210078041 A 20120322; JP 2011063624 A 20110323; TW 101109229 A 20120316;  
US 201213421232 A 20120315