

Title (en)
PORTABLE AXLE AND FRAME ALIGNMENT TOOL

Publication
EP 0386149 A4 19920520 (EN)

Application
EP 89900722 A 19881116

Priority
US 12185387 A 19871117

Abstract (en)
[origin: WO8904947A1] A portable apparatus for aligning the axles of a vehicle and for detecting irregularities in vehicle frames, has a light source (12) used to provide a reference plane (A). Dual targets (32, 70) are attached to the underside of the vehicle frame and are used in conjunction with the light source (12) to establish the reference plane (A). The light source (12) is slidably arranged on a horizontal bar (17) of U-shaped frame (10). Irregularities in the frame can be measured by measuring the distance from the reference plane (A) to the underside of the frame. The U-shaped frame (10) is directly attached to the wheel axle so that the horizontal bar (17) will be parallel to the axle. A perpendicularity checking device (110) which assures that the beam of light is perpendicular to the horizontal bar (17) is provided.

IPC 1-7
G01B 11/275

IPC 8 full level
G01B 11/275 (2006.01)

CPC (source: EP KR)
G01B 11/275 (2013.01 - EP KR); **G01B 2210/16** (2013.01 - EP); **G01B 2210/24** (2013.01 - EP); **G01B 2210/30** (2013.01 - EP)

Citation (search report)
• [Y] US 3962796 A 19760615 - JOHNSTON HARRY R
• [Y] US 4615618 A 19861007 - BAILEY MICHAEL P [US], et al
• [A] US 4630379 A 19861223 - WICKMANN JOHN T [CA], et al
• [A] US 4466196 A 19840821 - WOODRUFF JAMES L [US]
• [A] FR 2319141 A1 19770218 - SAMEFA AB [SE]
• See references of WO 8904947A1

Designated contracting state (EPC)
AT BE CH DE FR GB IT LI LU NL SE

DOCDB simple family (publication)
WO 8904947 A1 19890601; AU 2818689 A 19890614; EP 0386149 A1 19900912; EP 0386149 A4 19920520; JP H03500930 A 19910228; KR 890701989 A 19891222

DOCDB simple family (application)
US 8804117 W 19881116; AU 2818689 A 19891116; EP 89900722 A 19881116; JP 50056289 A 19881116; KR 890701362 A 19890719