



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
02.12.2015 Bulletin 2015/49

(51) Int Cl.:
E01B 3/28 (2006.01) **E01B 29/06 (2006.01)**
E01B 29/00 (2006.01) **E01B 37/00 (2006.01)**

(43) Date of publication A2:
04.12.2013 Bulletin 2013/49

(21) Application number: **13169677.5**

(22) Date of filing: **29.05.2013**

(84) Designated Contracting States:
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 States:
BA ME

(72) Inventors:
• **Bolmsvik, Rikard**
352 42 Växjö (SE)
• **Thureson, Mikael**
342 92 Alvesta (SE)

(30) Priority: **29.05.2012 EP 12169824**

(74) Representative: **Nilsson, Lars**
Awapatent AB
P.O. Box 665
Studiegången 3
831 27 Östersund (SE)

(71) Applicant: **Abetong AB**
351 03 Växjö (SE)

(54) **A method and an apparatus for tuning concrete railway sleepers**

(57) A method of tuning a concrete sleeper, comprising deforming the reinforced concrete sleeper beyond its elasticity limits by bending at least a portion of the reinforced concrete sleeper about a transverse axis thereof, thereby generating cracks in the reinforced concrete sleeper, before mounting it at a rail.

An apparatus for tuning reinforced concrete sleepers, comprising means for deforming a concrete sleeper beyond its elasticity limits by forcing at least a portion of the concrete sleeper to bend about a transverse axis thereof, thereby causing cracks in the concrete sleeper.

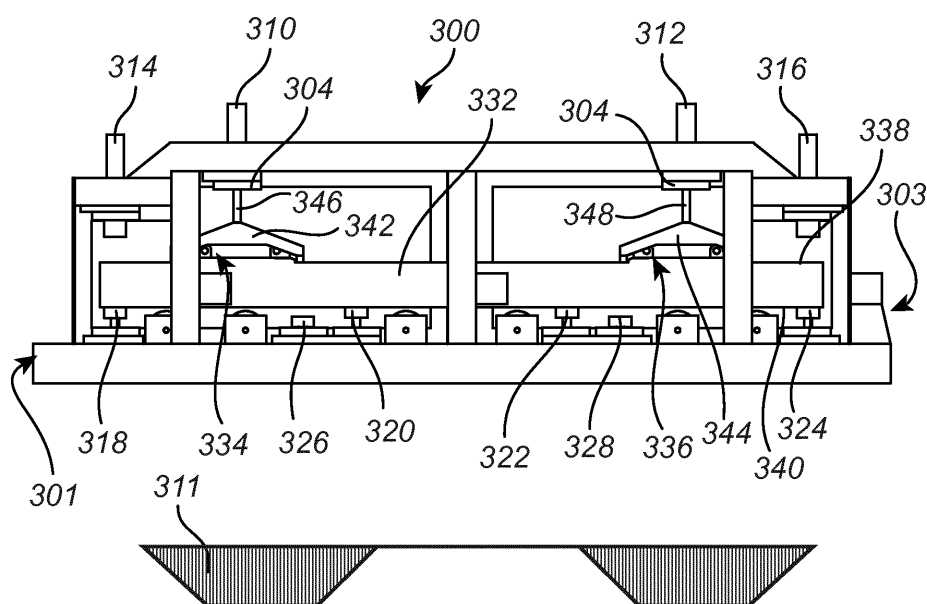


Fig. 4



EUROPEAN SEARCH REPORT

 Application Number
EP 13 16 9677

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X,P	Olli Kerokoski ET AL: "Loading Tests of Concrete Monoblock Railway Sleepers", 8 June 2012 (2012-06-08), XP55222831, Retrieved from the Internet: URL: http://www.nordicconcrete.net/ikbView/r/Content/870564/01 - F50 Korokoski_2012-06-08_FINAL.pdf [retrieved on 2015-10-22] * the whole document *	8-10	INV. E01B3/28 E01B29/06 E01B29/00 E01B37/00
X	EP 1 533 421 A2 (DB NETZ AG [DE]) 25 May 2005 (2005-05-25) * paragraph [0035]; figure 2 *	8-10	
A		1	
X	WO 2009/129554 A1 (KIRCHDORFER FERTIGTEILHOLDING [AT]; RINNHOFFER GERHARD [AT]; BARNAS ALE) 29 October 2009 (2009-10-29) * claims; figure 1 *	8-10	
			TECHNICAL FIELDS SEARCHED (IPC) E01B G01N G01M
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 26 October 2015	Examiner Movadat, Robin
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

EPO FORM 1503, 03.82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 13 16 9677

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

26-10-2015

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 1533421 A2	25-05-2005	DE 10354483 A1 EP 1533421 A2	02-06-2005 25-05-2005
WO 2009129554 A1	29-10-2009	AT 506813 A4 TR 201008696 T1 WO 2009129554 A1	15-12-2009 21-06-2011 29-10-2009

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82