



Europäisches Patentamt
European Patent Office
Office européen des brevets



(11)

EP 1 273 709 A3

(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3:
22.01.2003 Bulletin 2003/04

(51) Int Cl.7: **E01B 9/48, E01B 9/30**

(43) Date of publication A2:
08.01.2003 Bulletin 2003/02

(21) Application number: **02022626.2**

(22) Date of filing: **02.07.1998**

(84) Designated Contracting States:
FR

(30) Priority: **15.07.1997 GB 9714899**
13.05.1998 GB 9810241

(62) Document number(s) of the earlier application(s) in
accordance with Art. 76 EPC:
98932355.5 / 0 996 789

(71) Applicant: **PANDROL LIMITED**
Addlestone, Surrey KT15 2AR (GB)

(72) Inventors:

- **Marshall, Barry**
Sheffield, S17 3DG (GB)
- **Conroy, Brian George**
Worksop, Nottinghamshire S80 1XD (GB)

(74) Representative: **Fenlon, Christine Lesley et al**
Haseltine Lake & Co.,
Imperial House,
15-19 Kingsway
London WC2B 6UD (GB)

(54) **Railway rail fastening assembly**

(57) A railway rail fastening assembly, for fastening a railway rail to an underlying foundation comprises a resilient railway rail fastening clip (20) having thereon stop means (21c), for engaging cooperating means provided on a rail fastening clip anchoring device (400),

whereby overdriving of the clip (20) into the said anchoring device (400) is prevented, the stop means (21c) comprising one of an abutment surface and a projection and the said cooperating means comprising the other of the abutment surface and the projection.

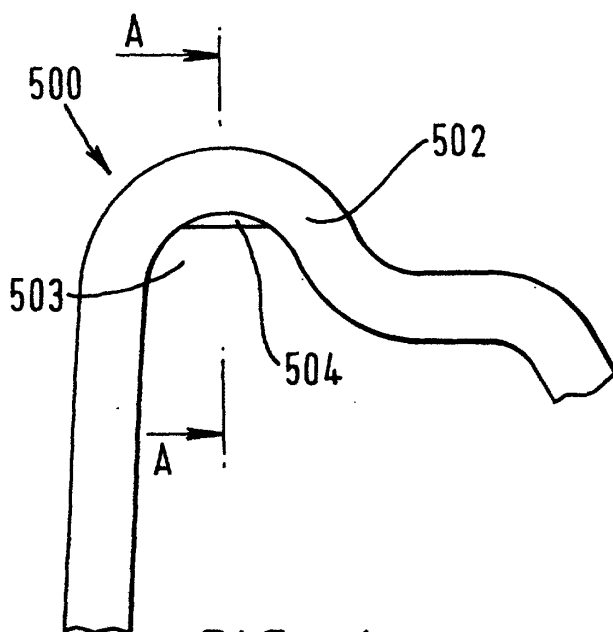


FIG. 4A.

EP 1 273 709 A3

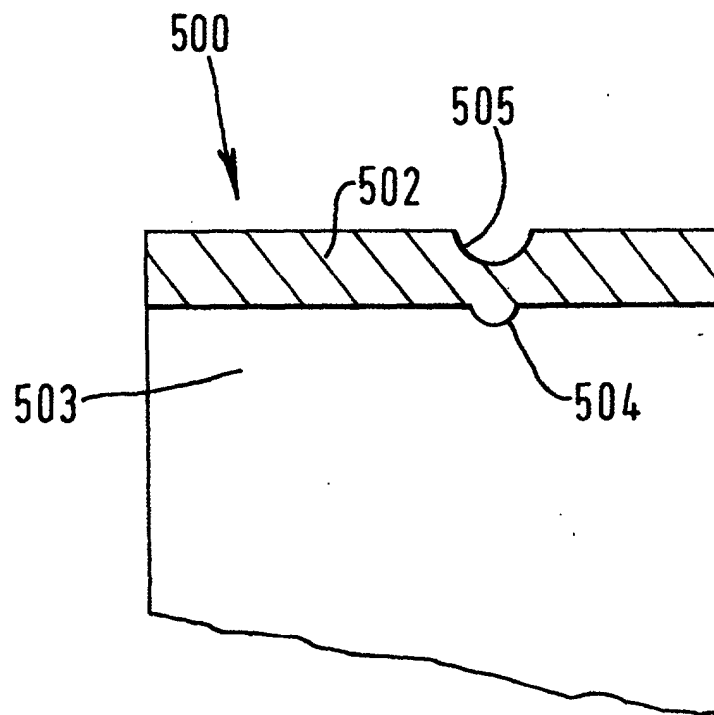


FIG. 4B.



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 02 02 2626

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	FR 2 436 848 A (FERROVIAIRES SOC) 18 April 1980 (1980-04-18) * claim 1; figures 1-3 *	1-4	E01B9/48 E01B9/30
X	US 5 520 330 A (GARDNER CHRISTOPHER ET AL) 28 May 1996 (1996-05-28) Ref. 18 * abstract; figure 6D *	1-4	
X	US 2 265 745 A (ROSCOE GEORGE H) 9 December 1941 (1941-12-09) * claim 1; figures 2,4,5 *	1,3,4	
X	US 4 832 261 A (FEE GRAHAM M) 23 May 1989 (1989-05-23) * abstract; figures 2,5 *	1-3	
X	CH 354 801 A (LOCKSPIKE LTD) 15 June 1961 (1961-06-15) * page 2, line 81 - line 115; figures 1,7-9 *	1,4	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			E01B
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 3 December 2002	Examiner De Neef, K
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 92 (P04001)

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

EP 02 02 2626

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.

03-12-2002

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
FR 2436848	A	18-04-1980	FR	2436848 A1	18-04-1980
US 5520330	A	28-05-1996	AT	149593 T	15-03-1997
			AT	152195 T	15-05-1997
			AU	3166893 A	19-07-1993
			AU	3166993 A	19-07-1993
			AU	3167093 A	19-07-1993
			BR	9207045 A	05-12-1995
			BR	9207046 A	05-12-1995
			CA	2126066 A1	19-06-1993
			CA	2126068 A1	19-06-1993
			CN	1077763 A ,B	27-10-1993
			CN	1081732 A	09-02-1994
			CN	1074500 A ,B	21-07-1993
			CZ	9401454 A3	14-06-1995
			CZ	9702448 A3	14-04-1999
			CZ	285827 B6	17-11-1999
			CZ	9401453 A3	16-08-1995
			DE	69217991 D1	10-04-1997
			DE	69217991 T2	12-06-1997
			DE	69219362 D1	28-05-1997
			DE	69219362 T2	07-08-1997
			DK	619851 T3	01-04-1997
			DK	619852 T3	16-06-1997
			EE	3266 B1	17-04-2000
			EE	3267 B1	17-04-2000
			EG	19913 A	31-10-1996
			EP	0619851 A1	19-10-1994
			EP	0619852 A1	19-10-1994
			ES	2098724 T3	01-05-1997
			ES	2100517 T3	16-06-1997
			FI	942840 A	15-06-1994
			FI	942841 A	15-06-1994
			WO	9312294 A1	24-06-1993
			WO	9312295 A1	24-06-1993
			WO	9312296 A1	24-06-1993
			GR	3023544 T3	29-08-1997
			GR	3023843 T3	30-09-1997
			HK	89397 A	27-06-1997
			HK	120597 A	05-09-1997
			HU	72283 A2	29-04-1996
			HU	71180 A2	28-11-1995
			JP	3055804 B2	26-06-2000
			JP	7506407 T	13-07-1995
			JP	7505932 T	29-06-1995
			JP	3187050 B2	11-07-2001

EPC FORM P0459

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

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

EP 02 02 2626

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.

03-12-2002

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5520330 A		KR 232089 B1	01-12-1999
		KR 232090 B1	01-12-1999
		LV 11909 A	20-12-1997
		LV 11909 B	20-05-1998
		LV 11910 A	20-12-1997
		LV 11910 B	20-05-1998
US 2265745 A	09-12-1941	NONE	
US 4832261 A	23-05-1989	NONE	
CH 354801 A	15-06-1961	NONE	