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(54) ADAPTER FOR RELAY

(57) The invention relates to railway safety. On the one hand, the proposal is to combine a vital relay (so called B-relay), inside a relay box or relay house which is associated with a railway, with an external, wireless remote from outside the relay box or relay house controlled switch inside the relay box or relay house, which

switch is arranged to switch the B relay (1) between "on" and "off". On the other hand the proposal is to mount, in an existing assembly of vital relay (1) and associated contact block (4) an adapter (3), which adapter is provided with a means to extend the functionality of the relay.

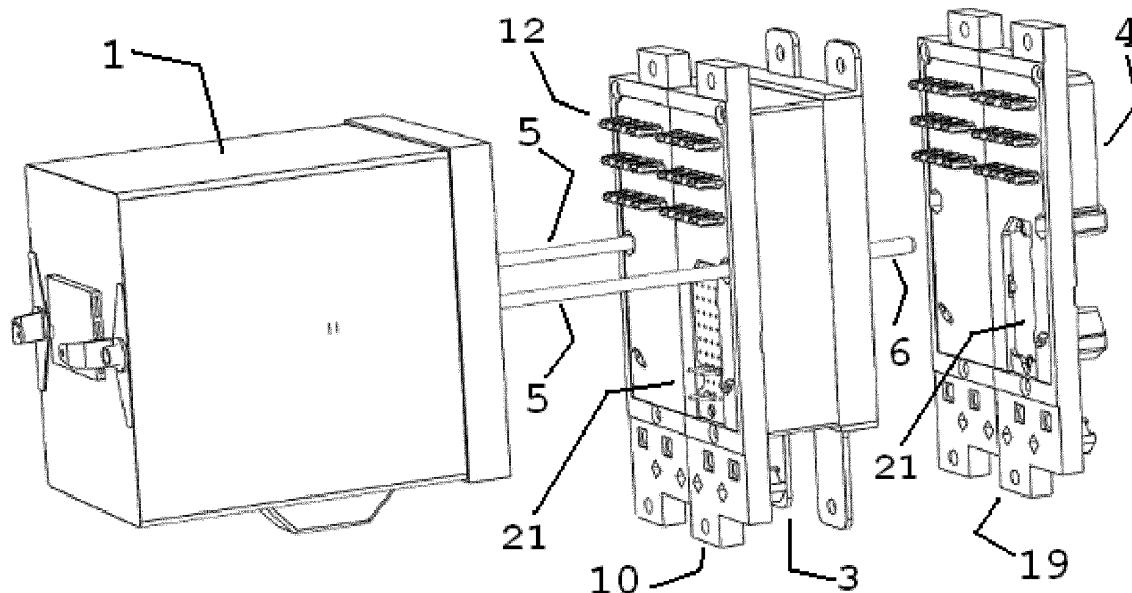


Fig. 3



PARTIAL EUROPEAN SEARCH REPORT

Application Number

EP 18 15 5652

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under Rule 62a and/or 63 of the European Patent Convention.
 This report shall be considered, for the purposes of
 subsequent proceedings, as the European search report

DOCUMENTS CONSIDERED TO BE RELEVANT									
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)						
10 X	JP 2017 010662 A (HIGASHI NIPPON RYOKAKU TETSUDO) 12 January 2017 (2017-01-12) * paragraph [0016] - paragraph [0035]; figures 1-11 *	5,8,9, 11,13,14	INV. B61L1/18 H01H50/04						
15 Y	US 6 454 368 B1 (BEDAU NORBERT [DE] ET AL) 24 September 2002 (2002-09-24) * column 7, line 10 - column 9, line 33; figures 1-10 *	6,7,12, 15							
20 Y	DE 44 13 468 A1 (SIEMENS AG [DE]) 26 October 1995 (1995-10-26) * column 1, lines 11-28 * * column 2, line 59 - column 3, line 4 * * column 3, lines 28-67 *	15							
25 A	EP 3 069 953 A1 (VOLKERRAIL NEDERLAND BV [NL]) 21 September 2016 (2016-09-21) * paragraph [0003] *	5,7							
30			TECHNICAL FIELDS SEARCHED (IPC)						
			B61L H01H						
INCOMPLETE SEARCH									
35	The Search Division considers that the present application, or one or more of its claims, does/do not comply with the EPC so that only a partial search (R.62a, 63) has been carried out.								
40	Claims searched completely :								
45	Claims searched incompletely :								
	Claims not searched :								
	Reason for the limitation of the search: see sheet C								
50									
55	<table border="1"> <tr> <td>Place of search</td> <td>Date of completion of the search</td> <td>Examiner</td> </tr> <tr> <td>Munich</td> <td>10 September 2018</td> <td>Mäki-Mantila, M</td> </tr> </table>			Place of search	Date of completion of the search	Examiner	Munich	10 September 2018	Mäki-Mantila, M
Place of search	Date of completion of the search	Examiner							
Munich	10 September 2018	Mäki-Mantila, M							
	<table border="1"> <tr> <td>CATEGORY OF CITED DOCUMENTS</td> <td colspan="2"> 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 </td> </tr> </table>			CATEGORY OF CITED DOCUMENTS	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				
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	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								



**INCOMPLETE SEARCH
SHEET C**

Application Number
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Claim(s) completely searchable:

5-9, 11-15

Claim(s) not searched:

1-4, 10

Reason for the limitation of the search:

1.1 Independent apparatus claims 1 and 5

With the office communication dated 22.06.2018, the applicant received an invitation pursuant to Rule 62a(1) EPC and Rule 63(1) EPC. The applicant was informed that in the European patent application as filed, the search division has identified multiple independent claims in the same category, in accordance with Rule 62a(1) EPC, and was invited to indicate the claims complying with Rule 43(2) EPC on the basis of which the search is to be carried out.

According to Guidelines B-VIII 4.1, if the European Patent Office considers that the claims as filed do not comply with Rule 43(2) (see F-IV, 3.2), it may invite the applicant to indicate, within a period of two months, claims complying with Rule 43(2) on the basis of which the search is to be carried out.

According to Guidelines B-VIII 4.2.2, if the applicant replies to the invitation under Rule 62a(1), indicating an independent claim in a particular category which he wishes the EPO to search, the EPO will conduct the search based on this claim. In reply to this invitation, the applicant may also indicate more than one independent claim in the same category for search, where these fall within the exceptions provided for in Rule 43(2) (see F-IV, 3.2). However, if the applicant does so, but the EPO finds that the claims indicated do not fall within the exceptions provided for in Rule 43(2), only the independent claim with the lowest number indicated by the applicant will be searched.

In the response letter dated 03.09.2018 the applicant has not presented any argument that independent claims 1 and 5 would fall within the exceptions provided for in Rule 43(2) EPC.

The search division finds that the originally filed independent apparatus claims 1 and 5 do not fall within the exceptions provided for in Rule 43(2) EPC.

With the letter of reply dated 03.09.2018, filed in electronic form on 01.09.2018 the applicant has changed the sequence of claims 1 - 6, wherein the subject-matter of new independent claim 1 corresponds to the subject-matter of originally filed claim 5 and the subject-matter of new independent claim 4 corresponds to the subject-matter of originally filed claim 1.

The search division has performed the search on subject-matter based on the independent apparatus claim with the lowest number indicated by the applicant. Hence for the category apparatus claim, the subject-matter of originally filed claim 5 (with dependent claim 6) with the clarifications indicated in the letter of reply dated 03.09.2018 (see claims 1 and 2) has been searched.

1.2 Independent method claim 7

The independent method claim 7 has been interpreted as indicated in the letter of reply dated 03.09.2018 (claim 7).

1.3 Dependent claims 8 - 15

As already indicated in the office communication dated 22.06.2018 Claims



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8 - 15 refer to a "Device or method according to one of the preceding claims". Claim 1 - 6 (as indicated in the letter of reply dated 03.09.2018) refer to a relay box or relay house. Claim 7 refers to a method. Hence, no "device" has been defined in the preceding claims.

The applicant argued that "The word "device" is synonym for "apparatus" and is generally used to refer to a claimed object and thus also covers a relay or relay box or relay house or any other object. Each subject matter within the claim category "apparatus" is a device." (see letter of reply dated 03.09.2018, page 1, 7th paragraph).

The search division considers that expression "device" is unclear, since in claims 1 - 6 more "objects" are defined: a relay box, a relay housing, an adapter, a contact block, a support frame, a with the relay associated element, etc. Hence it is presently unclear to which one of the above mentioned objects the expression "device" refers.

The intended limitations are therefore not clear from these claims.

1.4 Dependent claim 10

Claim 10 indicated as subject-matter to be searched in the letter of reply dated 03.09.2018 is identical with originally filed claim 10. As already explained in the office communication dated 22.06.2018, in originally filed claim 10 the intended limitation of the expression "the adapter simulates at its to the relay facing front the to the relay facing front of the contact block (4) and simulates at its to the contact block (4) facing back the to the contact block facing back (16) of the relay (1) so that the relay on the one hand and the contact block on the other hand can be associated with the adapter in the same manner as the relay can be directly associated with the contact block" is unclear to such an extent that claim 10 cannot be searched at all.

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

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5 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.

10-09-2018

10	Patent document cited in search report	Publication date	Patent family member(s)		Publication date
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EPO FORM P0459

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