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(54) **Steels for tyre rims and monobloc tyres for railways and the like**

(57) Steels for tyre rims and monobloc tyres for railways, tramways and underground railways, comprising two types of C-Mn-Ni-Mo steels micro-alloyed with B, Zr, Nb, V and Al.

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# EUROPEAN SEARCH REPORT

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| 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.6)    |
| X                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | DATABASE WPI<br>Week 7608<br>Derwent Publications Ltd., London, GB;<br>AN 76-24043X<br>& JP-A-51 002 616 (NIPPON STEEL CORP.KK) ,<br>10 January 1976<br>* abstract * | 1                                                    | C22C38/04<br>C22C38/44                          |
| X                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | ---<br>US-A-4 975 041 (FRIES STEVEN L ET AL) 4<br>December 1990<br>* table 1 *                                                                                       | 1                                                    |                                                 |
| X                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | ---<br>US-A-4 348 800 (DEMIANCZUK DIONISYJ ET AL)<br>14 September 1982<br>* column 8, line 5-27; claim 1 *                                                           | 1                                                    |                                                 |
| A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | ---<br>PATENT ABSTRACTS OF JAPAN<br>vol. 014 no. 363 (C-0746) ,7 August 1990<br>& JP-A-02 133544 (NKK CORP) 22 May 1990,<br>* abstract *                             | 1-6                                                  |                                                 |
| A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | ---<br>DE-C-34 46 794 (KRUPP STAHL AG) 2 January<br>1986<br>-----                                                                                                    | 1-6                                                  | TECHNICAL FIELDS<br>SEARCHED (Int.Cl.6)<br>C22C |
| The present search report has been drawn up for all claims                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                      |                                                      |                                                 |
| Place of search<br>MUNICH                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                      | Date of completion of the search<br>16 February 1996 | Examiner<br>Ries, R                             |
| CATEGORY OF CITED DOCUMENTS<br>X : particularly relevant if taken alone<br>Y : particularly relevant if combined with another document of the same category<br>A : technological background<br>O : non-written disclosure<br>P : intermediate document<br>T : theory or principle underlying the invention<br>E : earlier patent document, but published on, or after the filing date<br>D : document cited in the application<br>L : document cited for other reasons<br>& : member of the same patent family, corresponding document |                                                                                                                                                                      |                                                      |                                                 |

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