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### (54) **Safety barrier for road embankments**

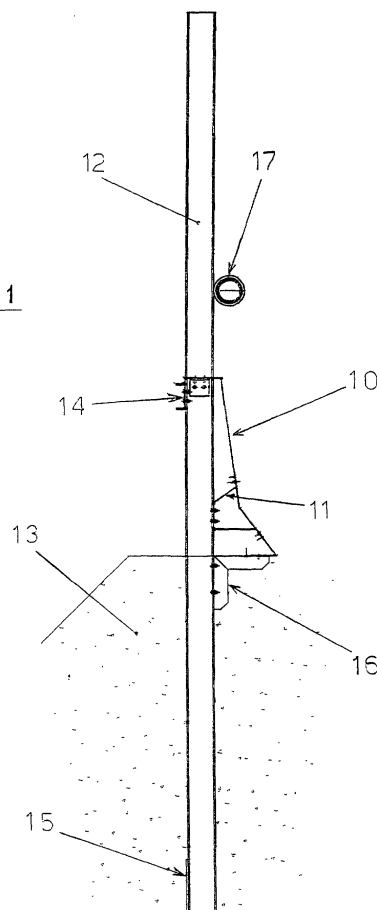
(57) Sheet-steel road safety barrier with a profile of a New Jersey type, adapted to be installed on road embankments. The barrier is formed by modular elements, each one of which is constituted by a cover wall (10) made of folded sheet-steel and provided with a rear longitudinal reinforcing rib (11).

The elements are fixed to vertical beams (12) that are stuck deep in the ground and are linked with each other by means of longitudinal tension rods (14).

The beams are provided with plates (15, 16) in their portion sticking in the ground.

The barrier is effectively anchored to the ground and provides a high extent of integration of its component parts.

FIG. 1



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# EUROPEAN SEARCH REPORT

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EP 99 11 1184

| 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) |
| Y   | EP 0 575 705 A (SISTEMA SRL)<br>29 December 1993 (1993-12-29)                 | 1,2,4                            | E01F8/00<br>E01F15/04                        |
| A   | * column 7, line 1 - column 8, line 39;<br>figures 9-13 *                     | 3                                |  |
| Y   | US 3 822 863 A (BIDWELL A)<br>9 July 1974 (1974-07-09)                        | 1,2,4                            |  |
| A   | * column 3, line 7 - line 59; figure 1 *                                      |                                  |  |
| A   | EP 0 518 304 A (FIMIT IPSE SRL)<br>16 December 1992 (1992-12-16)              | 1,4                              |  |
| A   | * column 2, line 35 - line 46; figure 3 *                                     |                                  |  |
| A   | DE 25 13 436 A (VOEST AG)<br>2 October 1975 (1975-10-02)                      | 1                                |  |
|   | * page 4, paragraph 4; figure 2 *   |                                  |  |
|   |   |                                  | TECHNICAL FIELDS SEARCHED (Int.Cl.7)         |
|   |   |                                  | E01F   |
| The present search report has been drawn up for all claims  |   |                                  |  |
| Place of search   |   | Date of completion of the search | Examiner                                     |
| THE HAGUE   |   | 27 May 2002                      | Verveer, D                                   |
| <p>CATEGORY OF CITED DOCUMENTS</p> <p>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</p> <p>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/> &amp; : member of the same patent family, corresponding document</p> |   |                                  |  |

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

EP 99 11 1184

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  
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27-05-2002

| Patent document<br>cited in search report |   | Publication<br>date | Patent family<br>member(s) | Publication<br>date |
|---|---|---------------------|----------------------------|---------------------|
| EP 0575705                                | A | 29-12-1993          | IT UD920013 U1             | 14-10-1993          |
|   |   |                     | AT 147814 T                | 15-02-1997          |
|   |   |                     | CZ 282647 B6               | 13-08-1997          |
|   |   |                     | DE 69307403 D1             | 27-02-1997          |
|   |   |                     | DE 69307403 T2             | 10-07-1997          |
|   |   |                     | EP 0575705 A1              | 29-12-1993          |
|   |   |                     | ES 2096123 T3              | 01-03-1997          |
|   |   |                     | GR 3022485 T3              | 31-05-1997          |
|   |   |                     | HU 213494 B                | 28-07-1997          |
|   |   |                     | SK 34793 A3                | 10-11-1993          |
| US 3822863                                | A | 09-07-1974          | NONE                       |                     |
| EP 0518304                                | A | 16-12-1992          | IT 223209 Z2               | 13-06-1995          |
|   |   |                     | EP 0518304 A1              | 16-12-1992          |
| DE 2513436                                | A | 02-10-1975          | AT 330234 B                | 25-06-1976          |
|   |   |                     | AT 258974 A                | 15-09-1975          |
|   |   |                     | BG 28349 A1                | 15-04-1980          |
|   |   |                     | CH 587968 A5               | 31-05-1977          |
|   |   |                     | CS 198371 B1               | 30-06-1980          |
|   |   |                     | DE 2513436 A1              | 02-10-1975          |
|   |   |                     | NO 751080 A ,B,            | 30-09-1975          |
|   |   |                     | SE 398250 B                | 12-12-1977          |
|   |   |                     | SE 7503617 A               | 29-09-1975          |