



Europäisches Patentamt
European Patent Office
Office européen des brevets



Publication number:

0 383 456 A3

(12)

EUROPEAN PATENT APPLICATION

(21) Application number: **90301001.5**

(51) Int. Cl.⁵: **E21D 11/40**

(22) Date of filing: **31.01.90**

(30) Priority: **16.02.89 GB 8903543**

(43) Date of publication of application:
22.08.90 Bulletin 90/34

(84) Designated Contracting States:
BE DE FR

(88) Date of deferred publication of the search report:
28.08.91 Bulletin 91/35

(71) Applicant: **Coal Industry (Patents) Limited**
Hobart House Grosvenor Place
London SW1X 7AE(GB)

(72) Inventor: **Wootton, Richard James**
188 Bretby Lane, Bretby
Burton-on-Trent, Staffordshire DB15
0QP(GB)

(74) Representative: **Butler, Lance**
Butler & Company PO Box 117 73 The Glade
Fetcham
Leatherhead, Surrey KT22 9LQ(GB)

(54) **Improvements relating to arch setting.**

(57) A three sectioned arch is set in an underground passage by mounting an arch crown section (9) in a fixture (23) and positioning the fixture on a platform (20) of a monorail transport device (16). The platform

(20) is raised and lowered through a linkage mechanism (21) to position the crown section while it is fixed in position.

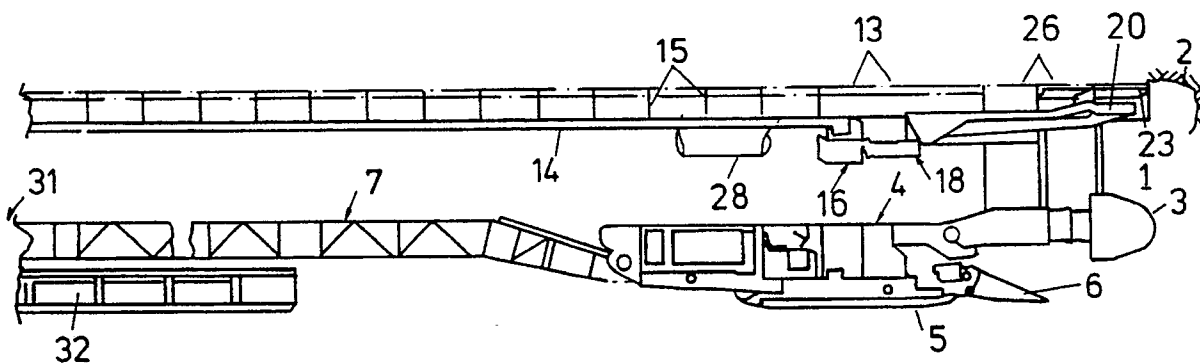


FIG. 1.

EP 0 383 456 A3



European
Patent Office

EUROPEAN SEARCH REPORT

Application Number

EP 90 30 1001

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.5)
E	GB-A-2 223 044 (COAL INDUSTRY) * Whole document *	1,2,5-13	E 21 D 11/40

A	DE-B-2 360 726 (RUHRKOHLE AG) * Column 4, line 44 - column 6, line 34; figures 1-7 *	1,5-8, 10-13	

A	GB-A-1 562 246 (HAYDEN NILOS) * Page 4, line 88 - page 5, line 38; figures 15-18 *	1,5-7, 10-13	

A	GB-A-1 549 192 (CROSSLEY) * Page 1, line 64 - page 2, line 17; figures 1-3 *	1	

A	FR-A-2 387 350 (EDBRO LTD) * Page 4, lines 21-36; page 8, lines 2-10; figures 1-7 *	1	

			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			E 21 D
The present search report has been drawn up for all claims			
Place of search		Date of completion of search	Examiner
The Hague		26 June 91	FONSECA Y FERNANDEZ
CATEGORY OF CITED DOCUMENTS			
X: particularly relevant if taken alone		E: earlier patent document, but published on, or after the filing date	
Y: particularly relevant if combined with another document of the same category		D: document cited in the application	
A: technological background		L: document cited for other reasons	
O: non-written disclosure		-----	
P: intermediate document		&: member of the same patent family, corresponding document	
T: theory or principle underlying the invention			