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Publication number: **0 344 931 A3**

EUROPEAN PATENT APPLICATION

Application number: **89304691.2**

Int. Cl.5: **G06M 1/272, G06M 1/14**

Date of filing: **09.05.89**

Priority: **28.05.88 GB 8812760**

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Date of publication of application:
06.12.89 Bulletin 89/49

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Designated Contracting States:
BE DE FR IT NL

Date of deferred publication of the search report:
30.10.91 Bulletin 91/44

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Counter.

A counter comprises a series of hollow digit-displaying drums (13-17), with mechanical driving connections (18 - 21) driving succeeding drums so that a decimal total number is set up. The higher significance digit drums (14 - 17) each carry an optical encoder comprising a cylindrical surface with slots forming a binary code which is related to the displayed digit. U-section reading devices (30 - 33) straddle the encoder to read the code and produce

an electrical coded output.

To avoid problems caused by readings at changeover points, the lowest significance digit-displaying drum (13) is associated with an impulse drive which is triggered at each changeover point to drive the drum forward so that it does not come to rest at the changeover point. The impulse drive comprises an off-centre weight which rotates with the drum.

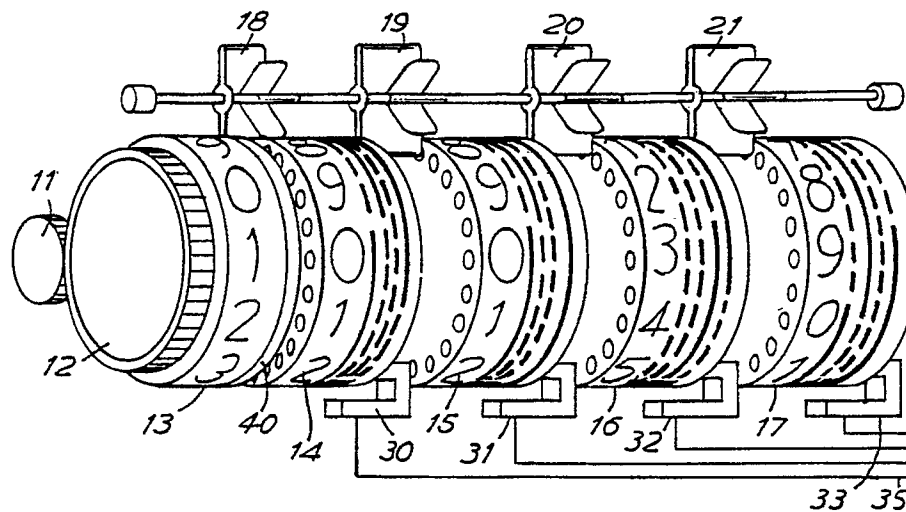


FIG. 1

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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.5)
X	US-A-3 896 298 (A.W. HAYDON) * Figures 1,3; column 1, lines 6-43; column 6, line 3 - column 7, line 30 *	1	G 06 M 1/272 G 06 M 1/14
Y	---	2-6	
Y	GB-A-1 126 522 (EVERSHED & VIGNOLES LTD) * Page 1, lines 16-75; claims; figures *	2-4	
Y	US-A-4 551 621 (BIANCHI) * Figures; column 1, line 40 - column 2, line 65; claims *	5,6	
A	EP-A-0 060 937 (LANDIS & GYR, ZUG AG) ---		
A	US-A-3 223 322 (G.O. HOFFMANN) -----		
			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			G 06 M
The present search report has been drawn up for all claims			
Place of search		Date of completion of search	Examiner
The Hague		20 August 91	GELEBART Y.C.M.
<p>CATEGORY OF CITED DOCUMENTS</p> <p>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</p> <p>E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons</p> <p>..... & : member of the same patent family, corresponding document</p>			