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(54) **Animated luminous sign.**

(57) The device finds its appliance in the luminous field for advertising or furnishing purposes, with animation of scenes and forms or figures. It consists of a standing and protecting structure or frame containing one or more luminous sources projecting forms of a sliding film-throughout different forms of a screen-over the forms of a slide so creating kind of animation. The animation can be obtained for forms moving in the opposite directions by running in front of the luminous sources two film sections which parallelly move in the opposite way, stretched by cylinders. Forthcoming result is the animation of different scenes such as: oven with wood and springing flames, aquarium with tiny bubbles with coloured fishes moving around in different directions, roasting-jack with flame, pastoral scenes with crops, etc...

The device allows simple double or multiple sights versions and possibility of frontal or flag exposures.

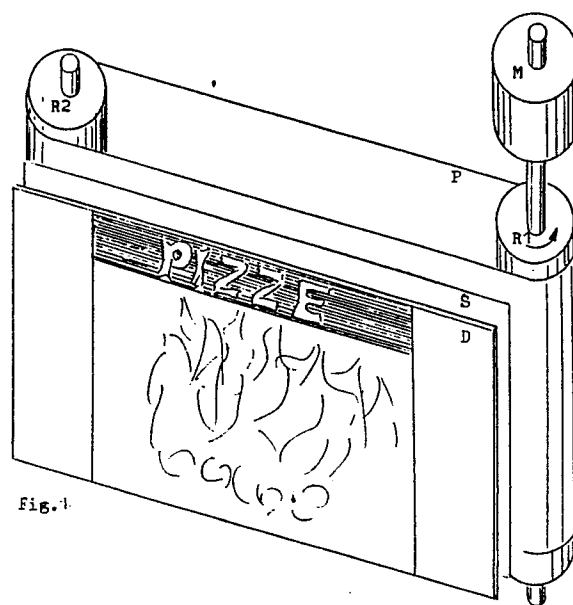


Fig. 1.

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DESCRIPTION OF INDUSTRIAL UTILIZATION MODEL, titled "Luminous device with writings, sceneries or animated forms or figures fit to create advertising appeals on signs and ornaments for inside or outside environments, with special effects and simple or multiple exposures or views."

Description Text

The present invention concerns a luminous device that placed into a specific standing and protecting frame or structure is fit to create efficacious advertising appeals and decorating effects, relaxing exciting or psychodelic; animation of writings, scenes or forms.

The device in its various feasibilities consists of:

- a) one or more luminous sources, marked L in the enclosed drawings,
- b) one film, marked P, the ends of which are glued together; this film is stretched and dragged by a couple of rotating cylinders, marked R, actioned by tiny electric reducing motors, marked M.

On this film, made of transparent material, dashes or forms or figures are reported;

- c) a fix or moving transparent screen, marked S, on which dashes or forms or figures are reported,
- d) a slide, marked D, on which writings and/or scenes and/or forms are represented.

The light radiated by L throughout the film P and the screen S creates animated effects on the scenery of slide D.

The device allows the creation of scenic effects with animations, conforming to the different requirements or objectives:

- luminous signs with advertising appeals by writings or forms or figures differently combined in sequence,
- animated luminous ornaments proper for internal or external environments, private or public, with decorating relaxing psychodelic effects, or sundry's.

The device allows furthermore, in its diversifications simple or multiple views or exposures possible to be projected on each side with equal or similar sceneries which can also become, on request, totally different between them.

Further specifications will result from the forthcoming detailed descriptions whereas references are made to the drawings of the enclosed tables.

Obviously the resulting effects of this present model are to be extended to those consequent ones having the same utilization with same inventive concept.

Fig.1: Perspective view of the base device where the small electric reducing motor M activates the cylinder R1; this cylinder in its rotary movement is dragging the film P, whereon the moving forms are displayed, and which is stretched

by another cylinder R2.

S and D are representing screen and slide, respectively as above described.

Fig.2: The device is seen from the top; luminous sources L are oriented on the moving forms of the film P which is sliding in its movement over the fixed forms of screen S; the combining of this movement is producing the animation on sceneries of slide D.

Fig.3: the same device, equipped with an extra screen S2 and extra slide D2 allows a double performance in the exposure of the animations, that is a front side view -V.ANT.- and a back side view -V.POST.

It occurs that the two animated exposures can be similar or variably diversified according to the combining and setting of forms and sceneries over screens S1 and S2 with slides D1 and D2.

Fig.4: a device similar to Fig.4 whereon the moving forms of the two stretched sections of film P running in both same and opposite directions between the luminous sources L and slide D are creating extremely fancy and particular animations. By this version the animation on slide D is seen with forms or sceneries of the film P which are running in opposite directions.

By a screen S interposed inbetween the two sections of the film P with slide D it is possible to get further different animation effects.

Fig.5: same effects as described for Fig.4 are possible by the employment of a couple of additional cylinders Q1 and Q2 which are enabling the approach of the two sections of the film P.

Fig.6: same device as Fig.4 with the addition of a film P2, dragged by cylinders Q1 and Q2, of an additional screen S2 and slide D2 enabling a back sight. as well, by the exploitation of same luminous sources.

Fig.7: a device similar to Fig.5 where, by the action of the two other cylinders Q1 and Q2 a film P2, projected on screen S2 is travelling forward. The alternatives, as described in Fig.6 and Fig.7 enable the animation of the "front" side of the device with a total different sight from the "back" one.

Fig.8: the device, similar to the one of Fig.5 is represented with a film P2 stretched between the two cylinders Q1 and Q2 while the approaching of the two sections of films P1 and P2 is obtained by the pressing action of two additional cylinders T1 and T2.

This version is enabling to get over same device the animation of forms or sceneries moving op-

posite ways with exposure of different animations from the front side V.ANT. and the back side V.POST.

Cylinders R.Q.T. can also be positioned in the horizontal way, according to the selected type of animation where the film P is made of any flexible material either natural or synthetic, diaphanous or transparent

Fig.9: the film is presented in a rolling version instead of running one; it can be actioned by the electric reductive motor or by hot air streams generated by the luminous sources. The scenes on two or more faces are animated by the same film P and they can be similar or totally differing among themselves.

Fig.10: the device is presented as a rolling disc with same specifications and functions of film P and similarly screen S and slide D maintain respective as above described.

By this alternative it is possible the animation of forms and scenes exposed on the slide.

As an example we are citing some practical versions which, however, are not to be intended as a limit to the various possibilities of appliance of the device.

- The scene represents a wood working oven with flame animations; it is in the front side of the device and, alternatively can be obtained on more sides and in the cylindric version. Because of its relaxing effects the device finds its appliance as furnishing item. Described scene combined with specific writings could be idoneous for pizza-shop advertisement; similarly the scene shown with fire-brands and animated roasting-jack turning over them could be idoneous to advertise meat and fish cook-shops. The device is structured to be exploited for the instalment of frontal, simple or multi-front signs or flagged signs with double exposures.

- The scene represents an aquarium where the water is animated by tiny bubbles moving in the upward way while some variegated coloured fishes are moving to the opposite direction. Because of its relaxing effects this alternative can be applied both in furnishing and advertising field.

- The scene represents a meadow with sheeps walking in the opposite direction, etc....

animated combined projections of forms and figures or scenes moving in the opposite directions.

3. Device, as per previous claim, idoneous to get for any face equal, similar or totally differing animations.

4. Device, as per claim 1, idoneous for advertising purposes with possibility of frontal signboards or flagged in conformity to previous claims and specifically as described and illustrated for the above specified alternatives.

Claims

1. Device with scenic effects ,writings,animated and luminous forms, particularly fit for advertising signs and furnishing appliances for public, private, internal or external environments; its peculiarity is to enable simple, double or multiple exposures either in a front, back or lateral sides other other than in a flagged version.

2. Device, as per claim 1, idoneous to get

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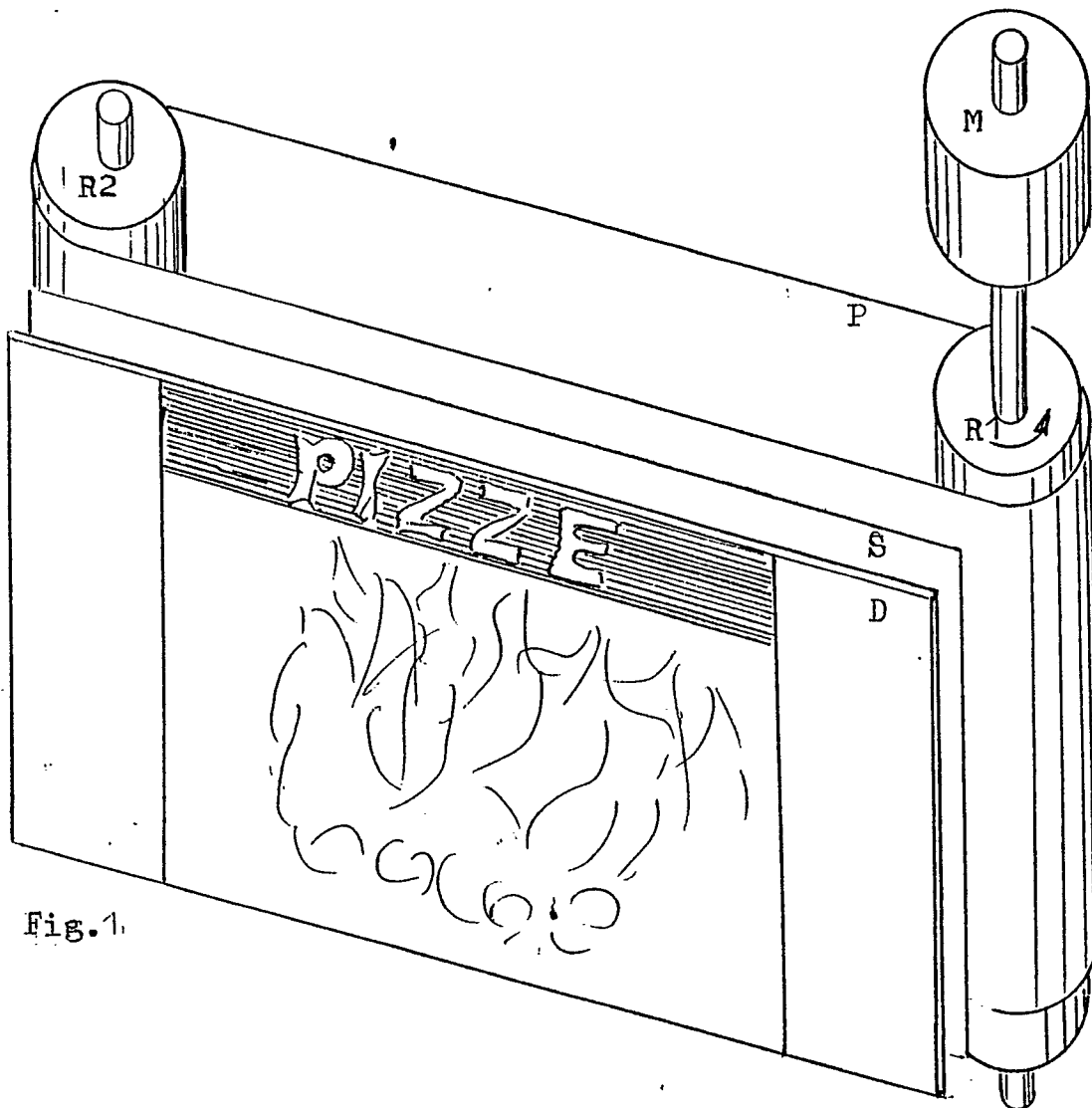


Fig. 1.

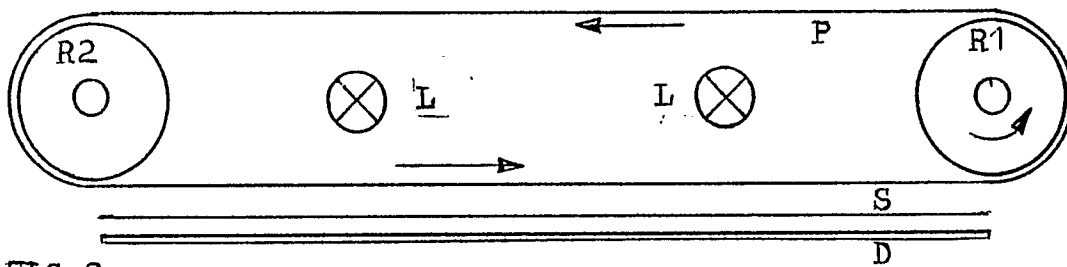


FIG. 2

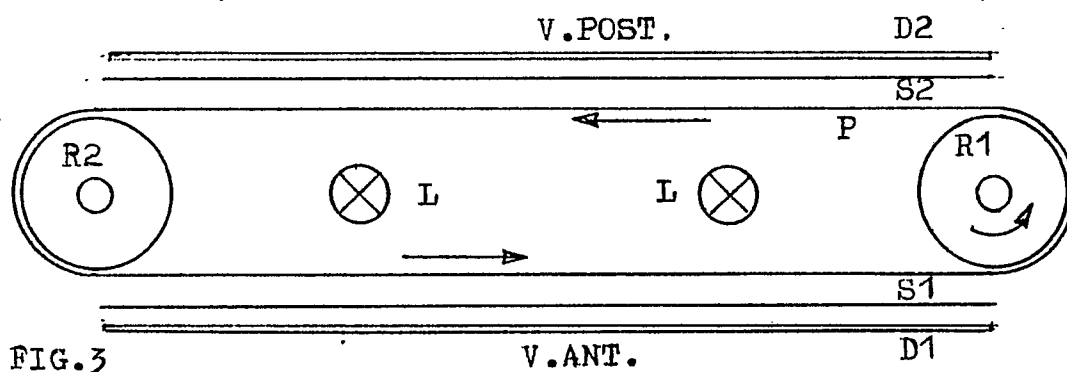


FIG. 3

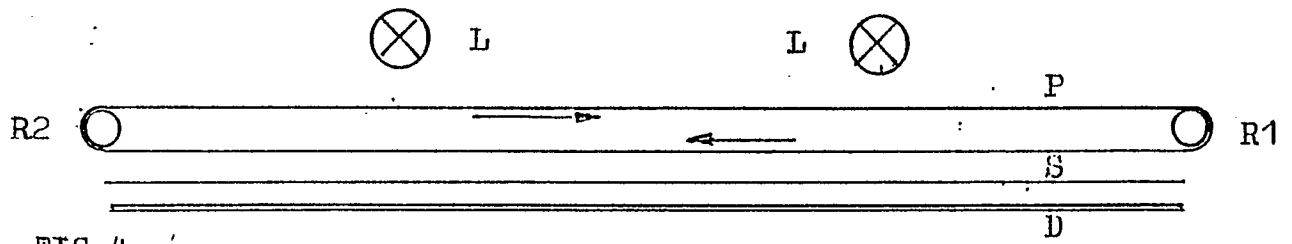


FIG. 4

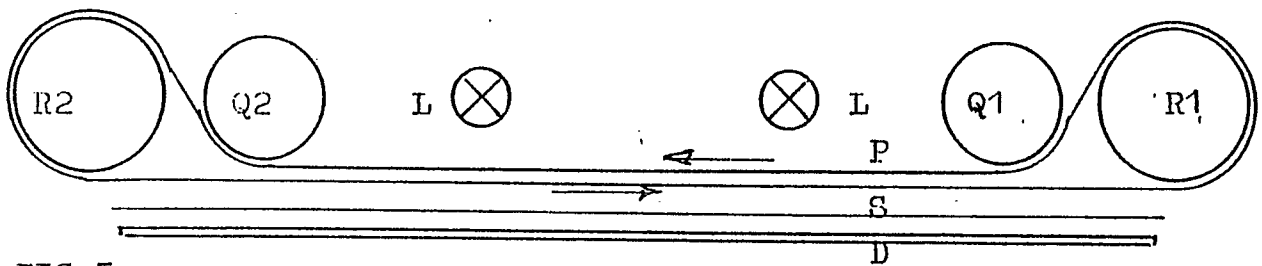


FIG. 5

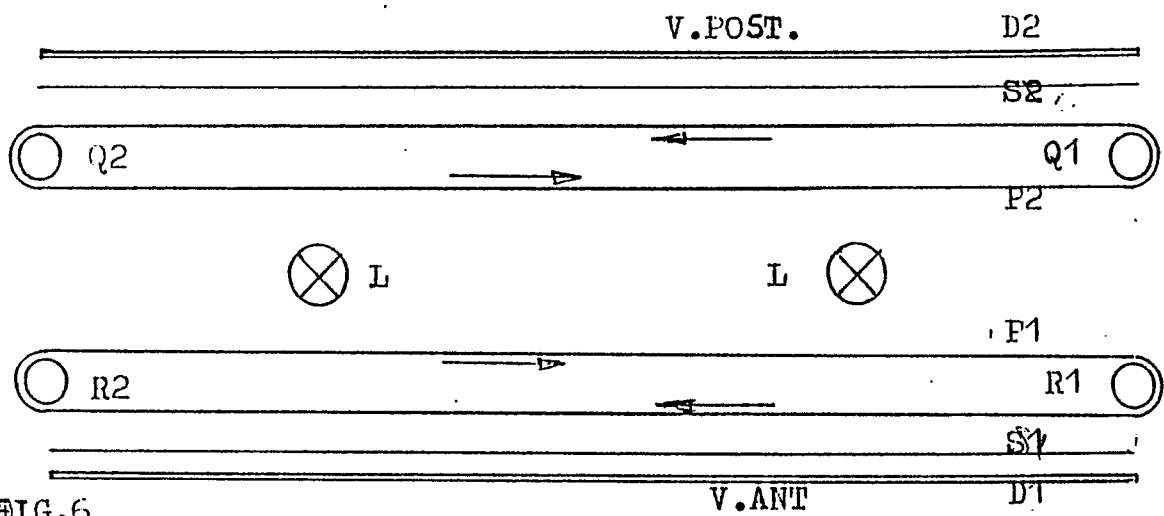


FIG. 6

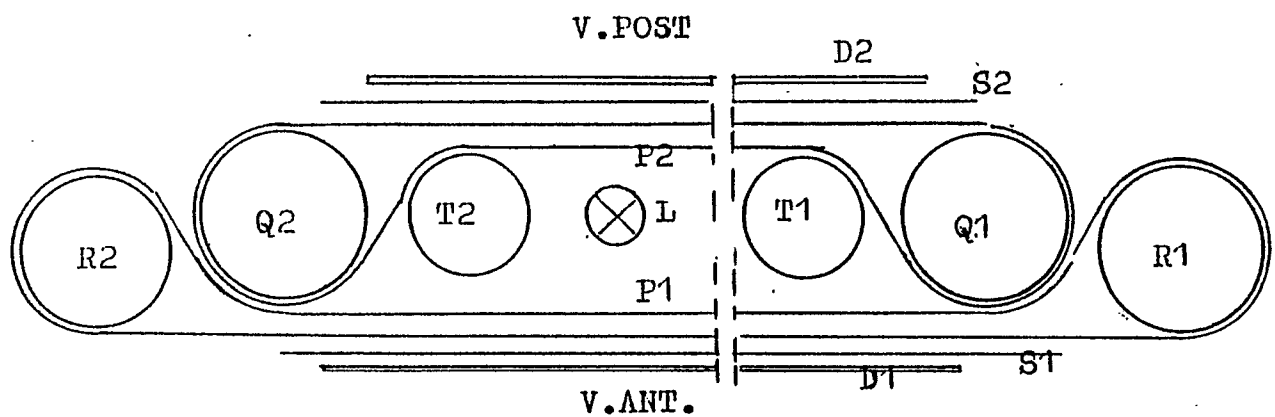


FIG. 7

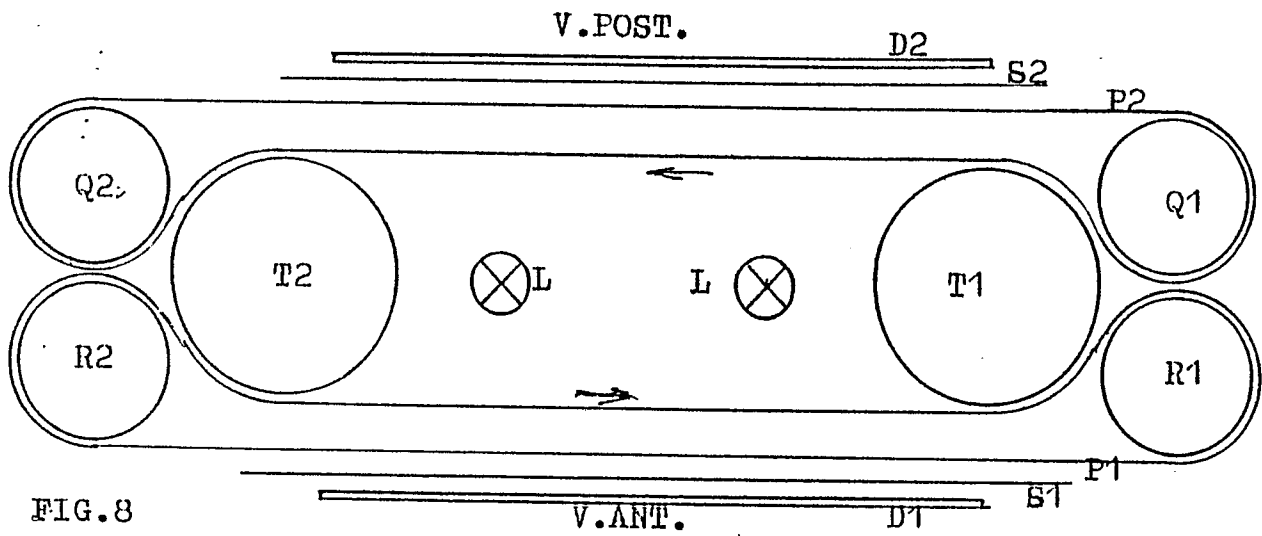
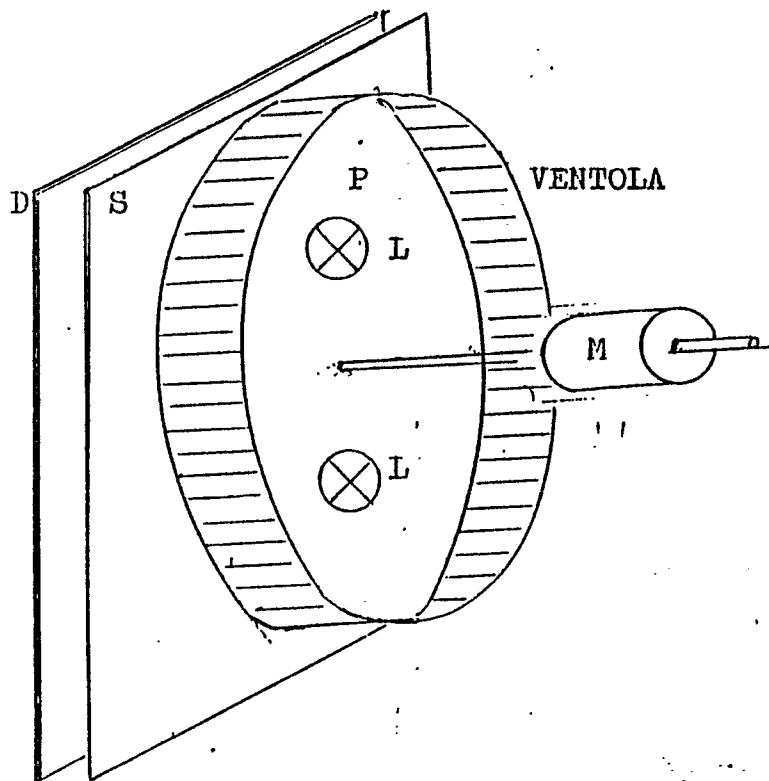
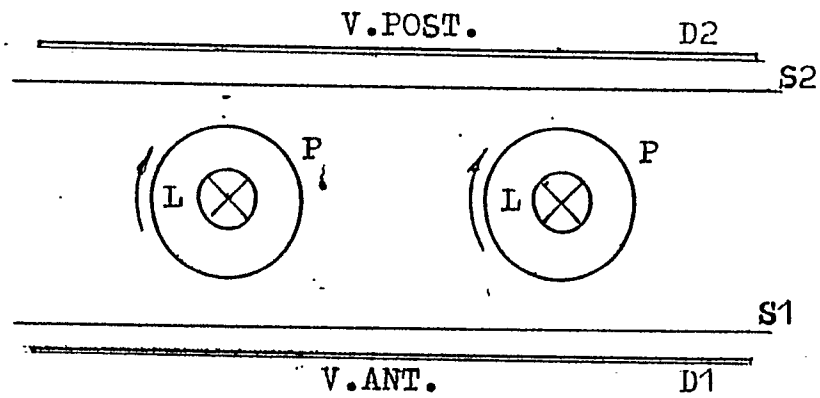


TAVOLA 3





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	DE-C- 220 040 (G. OUVRIERE) * the whole document * ---	1-4	G 09 F 13/34
X	FR-A- 764 078 (CH. BARILLON) * page 1, lines 1-45; page 2, lines 65-78; figures 1-4 * ---	1,2	
X	GB-A- 957 122 (F.J. MALINA) * page 1, lines 9-46; page 3, lines 12-89; figures 1,6,10 * ---	1,2,4	
X	GB-A-2 063 543 (D. STEPHEN) * page 1, lines 3-13,36-55,lines 76-79; claims 1-4,7,10; figures 1-3 * ---	1,2,4	
A	US-A-4 167 074 (J.F. CARDARELLI) * abstract; column 3, lines 17-55; figures 1-3 * ---	1,2	
A	GB-A-2 183 387 (BURON K.K.) * abstract; page 1, line 119 - page 2, line 11; page 2, lines 34-69; figures 1-3,5 * ---	1-4	TECHNICAL FIELDS SEARCHED (Int. Cl.5)
A	DE-A-2 718 972 (A. BOELCH) * page 4, lines 1-24; page 5, lines 11-28; page 9, lines 15-23; figures 22-24 * ---	1,2,4	G 09 F 13/00 G 09 F 19/00
A	DE-A-2 743 210 (SZOEVEKKEZET) * page 7, lines 15-26; page 8, lines 22-26; page 10, line 13 - page 11, line 17; figure 1 * -----	1,2,4	
The present search report has been drawn up for all claims			
Place of search BERLIN		Date of completion of the search 10-09-1990	Examiner BEITNER M.J.J.B.
CATEGORY OF CITED DOCUMENTS 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 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			