

## IN THE UNITED STATES PATENT OFFICE

In re application of  
 William F. Friedman et al.,  
 Serial No. 36,868,  
 Filed August 19, 1935,  
 Electrical Switching Mechanism

Div. 37, Room 5086-B

December 1, 1937.

Hon. Commissioner of Patents,

Sir:

Responsive to Patent Office Action dated June 7, 1937,  
 it is desired to amend as follows:

Claim 6, line 3, change "move" to -- actuate -- Same  
 line, cancel "independently" and before the semicolon substitute  
 -- in a discrete time relation --

Claim 7, line 6, cancel "independently" and substitute  
 -- asynchronously -- Last line, cancel "gearing" and substitute  
 -- units --

Claim 8, last line, cancel "gearing" and substitute  
 -- units --

Claim 10, before "variable" insert -- independently --  
 Line 5, cancel "independently" and substitute before the semicolon  
 -- respectively -- Last line, cancel "and in a random order."  
 Thus the last line as now amended should read "circuit connections  
 aperiodically."

Claim 11, line 3, cancel "independently "

Claim 12, line 3, cancel "independently "

Claim 13, line 3, cancel "comprising slipping drive elements "  
and substitute - - comprising continuously slipping drive elements - -  
Same line, before "varying" insert - - continuously - - and before  
"relation" insert - - time - - Last line of the claim cancel "order"  
and substitute - - manner - -

Claim 14, line 3, cancel "slip-disk drive elements and "  
and substitute - - continuously slipping drive elements and - -  
Line 4, before "varying" insert - - continuously and irregularly - -  
Last line of the claim cancel "relation" and substitute - - timing - -  
Also cancel "order " and substitute - - manner - -

Claim 15, line 4, after "connected" insert - - to said rings - -  
Same line, after "means " insert - - including differential gearing - -

Claim 16, line 5, cancel "independently" and substitute  
- - separately - - Last line, before "circuit" insert - - timing of the  
- - Same line, cancel "order " and substitute - - manner - -

Claim 17, line 4, cancel "independently and "

Claim 18, line 3, cancel "including slipping friction drive  
elements," and substitute - - including continuously slipping friction  
drive elements - - Same line, before "varying" insert - - continuously  
and irregularly - -

Claim 19, line 3, cancel "for varying " and substitute - -  
including continuously slipping drive elements for continuously and  
irregularly varying - - Line 4, cancel "independently" and substitute  
- - asynchronously - -

Claim 20, line 1, cancel "relatively" and substitute - -  
asynchronously - -

Claim 21, line 3, cancel "a" Line 4, after "means " insert  
- - including continuously slipping drive elements - - Same line, before  
"moving" insert - - continuously and irregularly - -

Claim 22, line 1, before "rotatable" insert - - oppositely - -

Claim 23, lines 4 and 5, cancel "independently" and substitute  
- - asynchronously - -

#### R E M A R K S

As regards the use of the word "independently" in certain of the claims, while it is true that the relatively rotatable contact drum and contact arm depend for movement upon the same motor, these bodies are not dependent upon the motor alone for relative rate of movement. The rate of variation is dependent upon the friction drives, the cams and the differential gearing, whether functioning separately or altogether in combination. Thus, in the combination of claim 6, for example, it is correct to say that each of the friction drives actuates said bodies in a discrete or separate time relation. This claim and other claims of the group criticized have been amended to express the intended meaning more exactly.

Claims 7 and 8 have been amended in the last line to meet the objection properly noted by the Examiner, which also cures the same objection with respect to claim 9.

Referring to claim 15, the amendment directed in line 4 will overcome the objection on the ground of indefiniteness. In this claim the same line has also been amended to include structure to support the functional statement.

It is contended that a random operation characterizes the present invention, but a random operation in respect to time, rather than a random sequence or order. The group of claims Nos. 10, 12, 13, 14, and 16 rejected as inaccurate on this ground have been amended and as now presented are thought to clear up the point of objection. As pointed out in previous arguments, in a system of complex operations as here disclosed in which constants and variables are combined, the resultant must be variable and unpredictable.

The newly cited patent to Boardman has been considered. Boardman shows a friction drive used in conjunction with a switching device for the sole purpose of permitting manual adjustment by means of a knurled nut (page 2, column 1, line 28 of Boardman patent). He does not provide a means for continuously and irregularly varying the relation between the elements of the friction drive components of his invention.

Furthermore, Boardman, in his construction shows a friction drive, manually adjustable, for the selection of a given number of circuits ( as shown in Figs. 9 and 10 of Boardman ) out of a plurality of circuits. He does not show at any place a construction permitting the variation of the time interval between successive circuits of a plurality of circuits.

Favorable reconsideration is courteously solicited in the light of the foregoing.

Respectfully submitted,

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By:  
Attorneys