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(54) Gaming machine.

The invention relates to a gaming machine comprising a keyboard and a plurality of display members arranged side by side and being controllable with the aid of the keyboard by means of an electrically and/or electronically operating mechanism, said display member having a plurality of particulate elements which can luminesce independently of one another by the supply of current so that with the aid of the display members luminescing signs can be formed whereby the display members and the electrically and/or electronically operating mechanism are designed so that a luminescing sign is displayed at least at three superjacent places in order of succession in a manner such that the impression is given that the sign is moving from top to bottom.

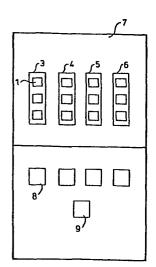


FIG.2

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Gaming machine.

The invention relates to a gaming machine comprising a keyboard and a plurality of display members arranged side by side and being control-5 lable with the aid of the keyboard by means of an electrically and/or electronically operating mechanism, said display members being provided with a plurality of particulate elements, which can luminesce independently of one another by the supply of current so that with the aid of the display members luminescing signs can be formed.

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Conventional gaming machines of the fruit machine type comprise a plurality of wheel-shaped members arranged side by side, at the peripheries of which various signs, frequently in the form of different products are illustrated. Means are provided to turn the wheel-shaped members with the aid of the keyboard and by means of an electronically and/or electri-15 cally operating mechanism, whilst braking members are provided for braking the wheel-shaped members by the action of the electrically and/or electronically operating mechanism. If after the wheel-shaped members have come to a standstill a given combination of signs is obtained on the adjacent wheel-shaped members, the player will obtain a given benefit 20 in the form of points, coins or the like.

The construction of such gaming machines comprising rotatable, wheel-shaped members, driving means for the hweel-shaped members and braking means for the wheel-shaped members is, however, complicated and expensive and subject to wear, which may result after some time in an incorrect operation of the gaming machine.

From German Patent Application 2,726,145 (Offenlegungsschrift) is known a gaming machine in which elements provided with seven light emitting diodes are used for imitating dice, each of which represents a given value in dependence on the ignited diodes. The "dice" are disposed in two rows of three adjacent dice, one above the other. In operation the light emitting diodes luminesce fairly arbitrarily in the dice.

The invention has for its object to provide a gaming machine of the kind set forth which gives the player the impression to play with the classical automatic fruit machine, in which the wheel-shaped members notate and 15 hence the signs arranged on these wheel-shaped members move from top to bottom in the player's field of view.

According to the invention this can be achieved in that the display members and the electrically and/or electronically operating mechanism are designed so that a luminescing sign is displayed at least at three super
20 jacent locations in a manner such that one gets the impression that the sign moves from top to bottom.

Preferably the surface in which the luminescing elements of the display members are located has an at least approximately curved shaped, which further enhances the impression of a moving wheel.

- The impression of a moving wheel is best approached when a sign is formed at a given location by causing the elements constituting the sign to luminesce in order of succession from top to bottom and to disappear by extinguishing the elements forming the sign in order of succession from top to bottom.
- The invention will be described more fully hereinafter with reference to a few embodiments of the construction in accordance with the invention schematically shown in the accompanying Figures.
 - Fig. 1 is a schematic elevational view of a display member used in the construction embodying the invention.
- Fig. 2 schematically shows the structure of a gaming machine provi-

ded with display members in accordance with the invention.

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Fig. 3 is a schematic side elevation of the array of three display members arranged one above the other in the gaming machine of Fig. 2.

Fig. 4 shows a further embodiment of a display member.

Fig. 5 is a side elevation of the device of Fig. 4.

The display member 1 shown in Fig. 4 comprises nine elements 2 arranged in the form of the digit 8. On the rear side of the display member 1 each element has its connection to an electric power source. The design is such that each of the elements 2 can be connected to the current source independently of the other elements and, respectively, be cut off so that each of the elements 2 can luminesce separately.

Dependent on the elements 2 caused to luminesce the display member shown in Fig. 1 can produce the digits 1, 2, 3, 4, 5, 6,7,8, 9 and 0 as well as the characters A, L, E and F. It will be obvious that in this 15 way with the aid of a single display member a great number of different signs formed by the luminescing elements can be shown. In accordance with the number and the array of the elements 2 in a display member more variations may, if desired, be made in the form of signs adapted to luminesce, whilst it can be imagined to cause different elements to luminesce in different colours and, as the case may be, other signs than digits and characters may be formed.

In the gaming machine schematically shown in Fig. 2 four columns 3 to 6, each having three display members 1 disposed one above the other are arranged side by side in a housing 7 of the gaming machine. Below each 25 of the columns, for example, a key 8 may be provided for a purpose to be described hereinafter, as well as a central control-key 9.

When the key 9 is depressed, all display members of the columns 3 to 6 will luminesce under the control of an electrically and/or electronically operating mechanism and in a fast order of succession the signs shown by 30 the display members will alternate until at a given instant the alternation of the displayed signs is interrupted and each display member 1 shows a given luminescing sign. In dependence on the array of the signs shown the player will gain, as the case may be, one or more points, coins or the like.

By disposing more display members one above the other in each of 35 the columns 3 to 6 a very near similarity to the conventional gaming machines

of the type comprising rotatable wheel-shaped members can be suggested during the shift of the signs as well as during the standstill of the luminescent reproduction of the signs, since it is now possible to cause in each of the columns 3 to 6 a given sign to luminesce first in the upper display member, then in the middle display member and subsequently in the lower display member so that the impression is given that the sign moves from top to bottom and at a given place a sign is preferably formed so that the elements 2 forming the sign are successively ignited from top to bottom, whilst the sign is caused to disappear by successively extinguishing the elements forming the sign from top to bottom.

A further advantage of the possibility of simultaneously obtaining a plurality of signs standing one above the other in each of the columns 3 to 6 resides in the fact that it is then also possible to allow a given benefit when a given combination of signs is obtained along an inclined row or a vertical row of displayed signs.

The keys 8 may be used to block the signs luminescing in one or more columns during the next-following game so that said signs will no longer shift.

Since, as is shown in Fig. 3, the display members 1 arranged one 20 above the other in the columns 3 to 6 are not disposed in a flat plane rather approximately along an arc, the resemblance of the device embodying the invention to the classical gaming machine with rotating wheels is further enhanced.

A further, effective embodiment of the gaming machine according to the invention can be obtained by using an elongate display member 10 having a very great number of elements 11 located side by side and one below the other, which can be individually caused to luminesce through connections 12 on the rear side of the display member 10. In order to obtain an optimal imitation of the conventional gaming machine with rotating wheels the display member 10 is slightly curved, as is shown in Fig. 5.

Owing to the great number of elements 11 in the elongate display member 10 it is possible to cause a plurality of signs to luminesce one above the other in a single display member, whilst the great number of elements 11 can provide a great diversity of forms of the signs to be re35 produced.

It will be obvious that by correctly programming the luminescence of the light emitting elements 11 the impression can be given that the luminescing signs move from top to bottom in the same manner as described above with reference to the first embodiment.

The figures used in the claims are only meant to explain more clearly the intention of the invention and are not supposed to be any restriction concerning the interpretation of the invention.

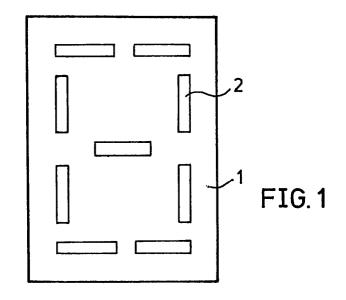
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CLAIMS

- 1. A gaming machine comprising a keyboard and a plurality of display members arranged side by side and being controllable with the aid of the keyboard by means of an electrically and/or electronically operating mechanism, said display member having a plurality of particulate elements which 5 can luminesce independently of one another by the supply of current so that with the aid of the display members luminescing signs can be formed characterized in that the display members and the electrically and/or electronically operating mechanism are designed so that a luminescing sign is displayed at least at three superjacent places in order of succession in a manner 10 such that the impression is given that the sign is moving from top to bottom.
 - 2. A gaming machine as claimed in Claim 1 characterized in that the surface in which the luminescing elements of the display members are located has, at least on approximation, a curved shaped.
- 3. A gaming machine as claimed in Claim 1 or 2 characterized in that 15 a sign is formed at a given location by causing the elements forming the

the sign to luminesce in order of succession from top to bottom, after which the sign is caused to disappear by extinguishing the elements forming the sign in order of succession from top to bottom.

4. A gaming machine as claimed in anyone of the preceding Claims
5 characterized in that each display member is formed by an elongate, preferably curved member provided with a great number of elements arranged side by side an one below the other to be caused to luminesce independently of one another by supplying current so that on said single display member at least three superjacent signs can be simultaneoulsy shown.



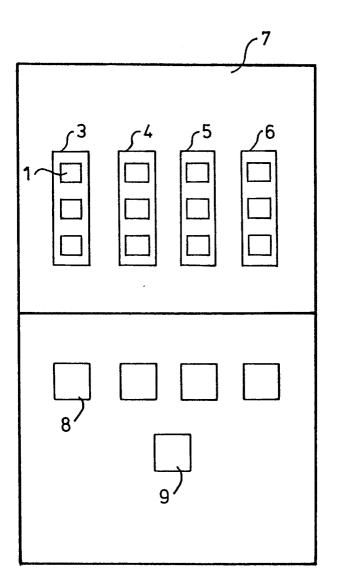


FIG.2

