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(54) Time indication system, particularly for the indication of hour

(57) The present invention relates to a time indication system, particularly for the indication of hours characterised in that it comprises a series of sectors (51) preferably provided one after the other one, each one representing a time reference, at least a movable indi-

cator (6), that can move along said sectors (51), by control means controlling said at least a movable indicator (6) and timing means, said timing means displacing said movable indicator (6) from one sector (5) to another one each preset time interval, by said control means.

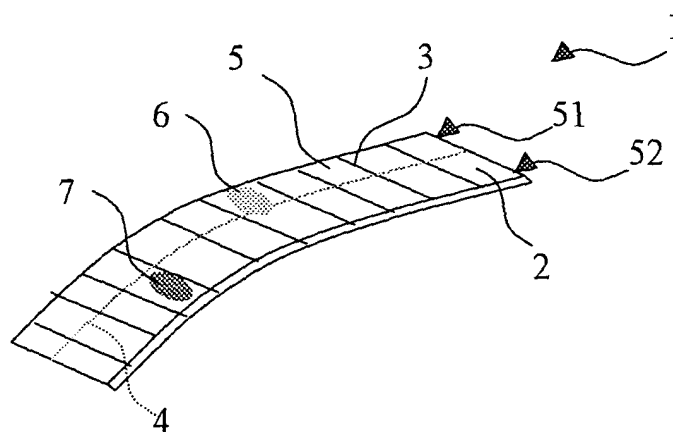


Fig. 1

Description

[0001] The present invention concerns a time indication system, particularly for the indication of hours.

[0002] More specifically, the invention concerns a system for indicating the time which is an alternative to the conventional methods for showing the hour, and that can be used in different alternative ways.

[0003] As it is well known, different systems existed in history for the indication of the time, based on the displacement of some references. For example, we can think to the old sundial, that was based on the displacement of the shadow created by a fixed reference (a stick, vertical or fixed in a wall) along a signalling scale.

[0004] At present, more precise systems exist that, being now coded, are of common use for each one of us.

[0005] Watches are available on the market both of big size and of very reduced size. However, they do not provide an adaptability of the shape to the specific application points.

[0006] Really, it would be necessary to have at disposal a system as the one suggested according to the present invention, for the indication of the time that, without any constraint due to the sizes, can be adapted to surfaces or ambits wherein it is applied, said system allowing, among other things, to be comprised in clothes. In this frame it is included the solution according to the present invention.

[0007] Therefore, it is object of the present invention that of providing an alternative time indication system, and particularly for the indication of the hour, allowing to realise watches that can flexibly adapt with their shape to every surface they can be applied.

[0008] Another object of the invention is that of making it possible the application of the watch obtained by said indication system also to flexible objects subjected to stresses such as clothes.

[0009] It is therefore specific object of the present a time indication system, particularly for the indication of hours characterised in that it comprises a series of sectors preferably provided one after the other one, each one representing a time reference, at least a movable indicator, that can move along said sectors, by control means controlling said at least a movable indicator and timing means, said timing means displacing said movable indicator from one sector to another one each pre-set time interval, by said control means.

[0010] Always according to the invention, said system can comprise two movable indicators for two different time references, a first indicator for indicating hours and a second indicator for indicating minutes.

[0011] Still according to the invention, said at least one indicator can be luminous.

[0012] Furthermore, according to the invention, said at least a series of sectors can be put on a virtual sector as the screen of a personal computer.

[0013] Still according to the invention, said at least a series of sectors is provided on a flexible plastic support.

[0014] Preferably, according to the invention, said at least a series of sectors can be provided according to a linear or circular position.

[0015] Furthermore, according to the invention, said system can comprise a second series of sectors, provided parallel with respect to the first one, to indicate a different time reference.

[0016] Always according to the invention, said control means can be electrical or mechanical means.

[0017] Preferably, according to the invention, said indicators can be comprised of LEDs or of liquid crystals and/or laser and/or lamps.

[0018] Still according to the invention, said series of sectors can comprise eleven sectors provided parallel each other and that can comprise the following conditions for the indication of time:

- a. lack of lights: indicated time 00:00 or 12:00
- b. lighting of one of the eleven sectors of the first series of sectors indicates a time increase of one hour;
- c. lighting of one of the sectors of the second series of sectors indicates a time increase of five minutes.

[0019] The present invention will be now described, for illustrative but not limitative purposes, according to its preferred embodiments, with particular reference to the figures of the enclosed drawings, wherein:

- Figure 1 shows a first embodiment of the time indication system;
- Figure 2 shows different time configurations of the first embodiment of figure 1; and
- Figure 3 shows a second embodiment of the time indication system.

[0020] Making first reference to figure 1, it is possible to observe a first embodiment of a watch 1 wherein the time indication system according to the invention is employed. Particularly, it is possible to note a flat and lengthened, flexible material strip 2, said strip 2 providing a series of transverse trace 3. A line 4 is indicated perpendicularly to the traces 3, said line 4 running all along the strip 2, thus individuating two parallel series 51 and 52 of sectors 5.

[0021] Sectors 5 particularly individuate references for the time. In fact, a pair of movable lights 6 and 7, having different colours, is provided on the strip. First light 6 indicates hour, while light 7 indicates minutes. Said lights move along the strip 2, moving from a sector to another one.

[0022] In figure 2 it is shown a series of four time configurations and the vertical series 51 of sectors 5 indicates the hours, while series 52 indicates minutes. Particularly in figure 2a it is present configuration hour "0:00" or "12:00", indicated by the complete absence of light on sectors 5. instead in figure 2b it is shown configuration "1:00" being light moved in first sector of se-

ries 5, while light 7 is absent. Instead in figure 2c it is shown the configuration hour "1:05", individuated by light 6 on the first sector of series 51 and by light 7 on series 52. thus in the present case, series of sectors 5 indicating minutes is calibrated in such a way the each sector 5 covers 5 minutes. Finally, figure 2d shows the configuration hour "8:30", being the light 6 in the eighth sector of series 51, and light 7 in the sixth sector of series 52.

[0023] Finally, in figure 3 it is possible to observe a variation of the present invention, providing the circular positioning of series of sectors 51 (outer crown) and 52 (inner crown). In the configuration "no lights", time indicated can be "0:00" or "12:00". Instead, in the figure, being the first sector lightened (counting from above, and prosecuting clockwise) of series 51 with light 6 and the fifth sector of series 52 with light 7, the indication of hour "1:25".

[0024] Lights 6 or 7, to lighten sectors 5, can be realised by standard LEDs, or by implementing sectors with LCD, or by pointing rays by standard lamps or LASER. Obviously, it will be necessary to provide an electronic or mechanical control system for adjustment of LEDs or LCD, respectively, or of the lighting lamps or of LASER pointers.

[0025] It is also possible to implement the time indication system, as that of figure 1 or 3, on the screen of a personal computer by a simple and suitable program.

[0026] An advantage of the present invention is that of being able to create a watch provided with a physical flexibility, thus being conformable to each surface.

[0027] The time indication system described in the above can be easily adapted, by simple modifications, to indicate, for example, the daily date or the day of the week.

[0028] The present invention has been described for illustrative but not limitative purposes, according to its preferred embodiments, but it is to be understood that modifications and/or changes can be introduced by those skilled in the art without departing from the relevant scope as defined in the enclosed claims.

Claims

1. Time indication system, particularly for the indication of hours **characterised in that** it comprises a series of sectors preferably provided one after the other one, each one representing a time reference, at least a movable indicator, that can move along said sectors, by control means controlling said at least a movable indicator and timing means, said timing means displacing said movable indicator from one sector to another one each preset time interval, by said control means.
2. Time indication system according to claim 1, **characterised in that** said system comprises two mov-

able indicators for two different time references.

3. Time indication system according to claim 1, **characterised in that** it comprises a first indicator for indicating hours and a second indicator for indicating minutes.
4. Time indication system according to one of the preceding claims 1 - 3, **characterised in that** said at least one indicator is luminous.
5. Time indication system according to one of the preceding claims, **characterised in that** said at least a series of sectors is put on a virtual sector as the screen of a personal computer.
6. Time indication system according to one of the preceding claims 1 - 5, **characterised in that** said at least a series of sectors is provided on a flexible plastic support.
7. Time indication system according to one of the preceding claims, **characterised in that** said at least a series of sectors is provided according to a linear position.
8. Time indication system according to one of the preceding claims 1 - 6, **characterised in that** said at least a series of sectors is provided according to a circular position.
9. Time indication system according to one of the preceding claims, **characterised in that** said system comprises a second series of sectors, provided parallel with respect to the first one, to indicate a different time reference.
10. Time indication system according to one of the preceding claims, **characterised in that** said control means are electrical means.
11. Time indication system according to one of the preceding claims 1 - 9, **characterised in that** said control means are mechanical means.
12. Time indication system according to one of the preceding claims 1 - 11, **characterised in that** said indicators are comprised of LEDs or of liquid crystals and/or laser and/or lamps.
13. Time indication system according to one of the preceding claims, **characterised in that** said series of sectors comprises eleven sectors provided parallel each other.
14. Time indication system according to claim 13, **characterised in that** it comprises the following conditions for the indication of time:

- a. lack of lights: indicated time 00:00 or 12:00
- b. lighting of one of the eleven sectors of the first series of sectors indicates a time increase of one hour;
- c. lighting of one of the sectors of the second series of sectors indicates a time increase of five minutes.

15. Time indication system according to each one of the preceding claims, substantially as illustrated and described.

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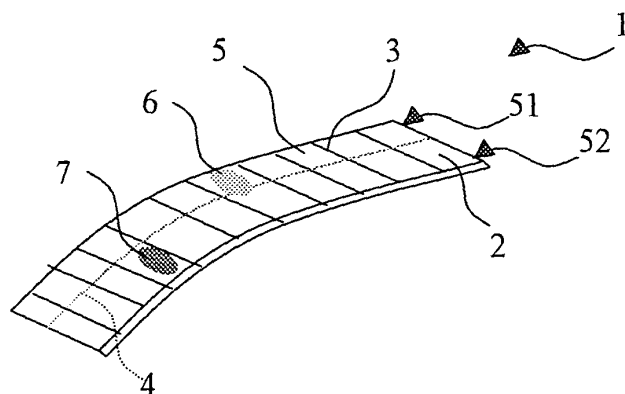


Fig. 1

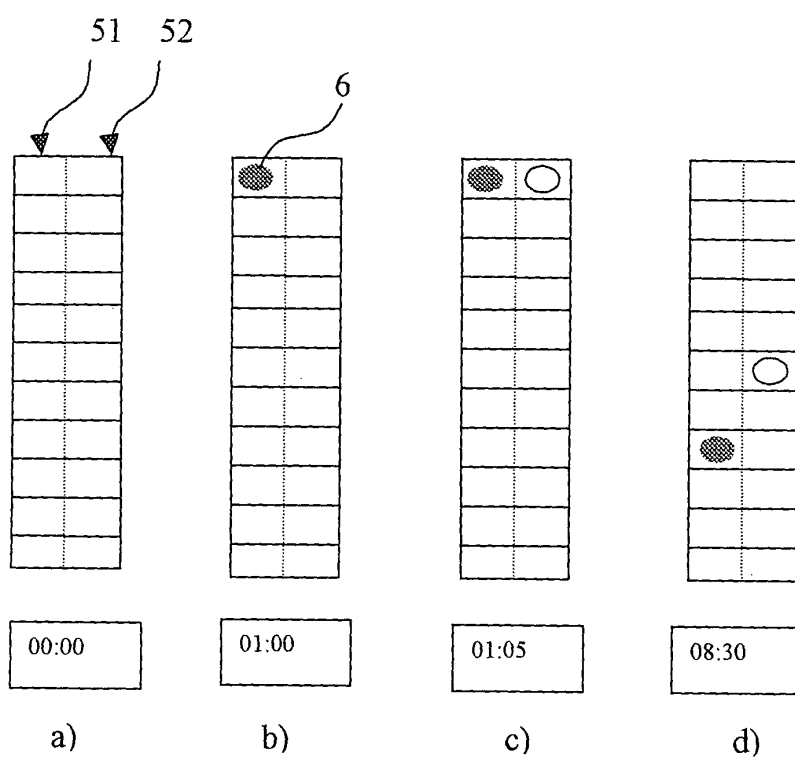


Fig. 2

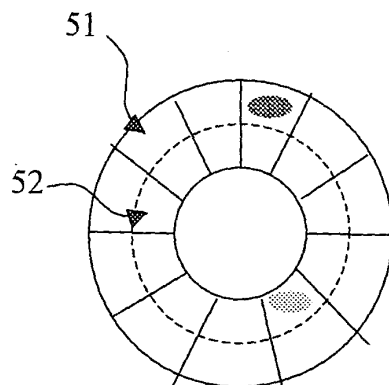


Fig. 3