

[54] **MOTOR ROTATED AND TIMED CUE CHALKER**

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[58] Field of Search. .... **273/18, 19, 21; 144/28.4, 28.5, 28.72; 200/61.59; 318/177, 484**

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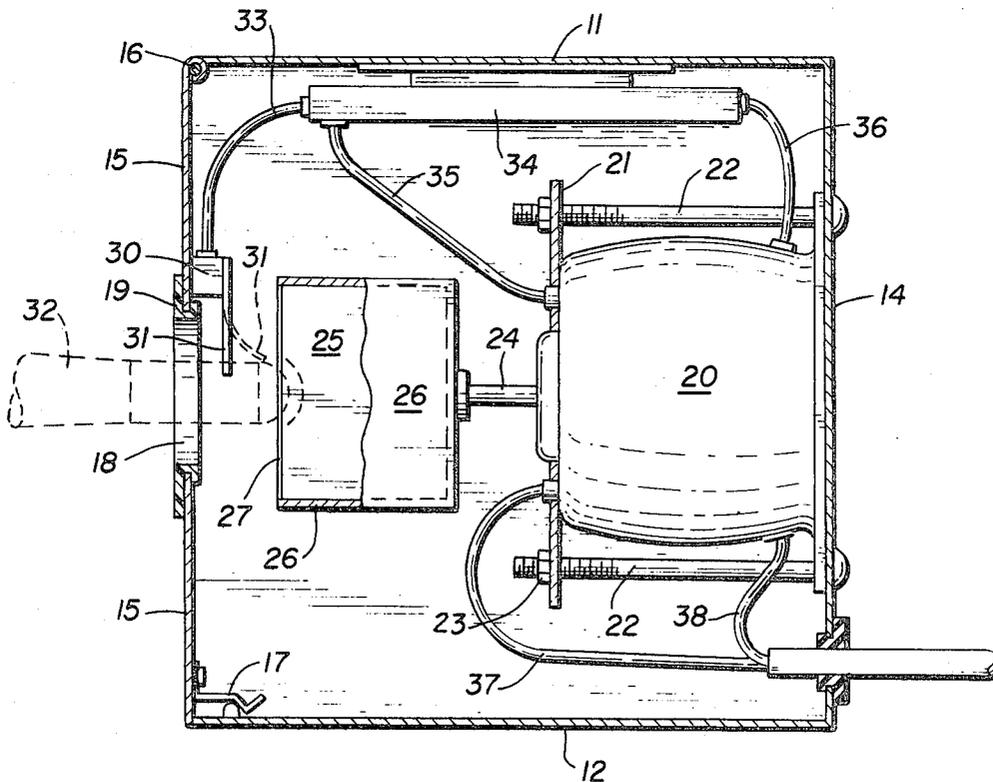
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[57] **ABSTRACT**

A cue chalker comprising a housing and a block of chalk mounted in a holder rotated by a timed electric motor in the housing, the operation of the motor being started by switch means activated by a cue manually placed into contact with the chalk through an opening in the housing, and automatically stopped at the end of a predetermined time, such as 10 seconds, selected as the optimal time required for efficient chalking of a cue. The automatic stopping of the motor occurs regardless of whether the cue is in contact with the chalk. The switch means includes a starter device which is flexible to have wiping contact with the cue tip surface as the cue is being moved manually into chalking position, and is automatically returnable to its normal "off" position when the cue is withdrawn.

**2 Claims, 3 Drawing Figures**





**MOTOR ROTATED AND TIMED CUE CHALKER**

This invention relates to a motor rotated and timed cue chalker.

Power driven cue chalkers have been disclosed in prior patents, but those heretofore in use are activated and continuously actuated by uninterrupted contact between the cue tip and the chalk, and rotary motion is imparted to the chalk block as long as the cue is in contact with it. This results in unnecessarily prolonged chalking of the cue and consequent waste of chalk and wear on the motor.

The main object of this invention is to provide one or more cue chalker units mounted in a wall, each comprising a block of chalk operatively connected to a timed electric motor, mounted in a housing having a front opening for receiving the cue and a front removable or hinged panel for access to the housing interior for replacement of the chalk. Operation of the motor is started by switch means activated by contact with a cue as it is being placed into contact with the chalk. The motor is automatically stopped at the end of a predetermined time, such as ten seconds, selected as the optimal time required for efficient chalking of a cue. The automatic stopping occurs even if the cue has not been withdrawn from contact with the chalk.

The starter means for the switch is mounted between the chalk block and the front panel of the chalker housing adjacent a front opening therein for wiping contact with the cue surface as the cue is being moved manually into chalking position. For this purpose the starter means is flexible and automatically returnable to its normal "off" position when the cue is withdrawn.

In the drawings:

FIG. 1 is an isometric view of a single unit motor rotated and timed cue chalker embodying my invention.

FIG. 2 is a vertical sectional view of the chalker, showing the tip end of a cue in broken lines in position to be chalked.

FIG. 3 is a front elevational view of three of the chalker units mounted in a wall panel.

In the embodiment of the invention shown in the drawings, the chalker unit 10 comprises a housing having a top 11, bottom 12, sides 13, rear wall 14 and front panel 15. The front panel 15 is hingedly connected at 16 to the top 11 and is retained in closed position by a snap latch 17 consisting of cooperating parts fastened to the inner surfaces of the panel 15 and bottom 12. The front panel is provided with an opening 18 defined by a ring 19.

An electric motor 20 is mounted in the housing 10 adjacent the rear wall 14 by a plate 21 fastened by bolts 22 and nuts 23 to the rear wall. The motor shaft 24 is operatively connected to a chalk block 25 preferably mounted in a holder 26 open on its forward face to expose the chalk block front facing surface 27 axially aligned with the opening 18 in the front panel of the housing.

A micro-switch 30 fixedly connected to the inner surface of the front panel 15 adjacent and slightly above the opening 18 has mounted thereon a motor starter 31 made of flexible material, the starter 31 being located to have wiping contact with a cue 32 as it is being man-

ually moved through the opening 18 and into contact with the chalk block surface 27. The switch 30 is electrically wired at 33 to timing means 34 connected by electrical wiring 35, 36, to the motor 20. The motor is connected by lines 37, 38, to a source of current.

The motor 20 is energized by the micro-switch 30 when the manually inserted cue 32 actuates the starter means 31, as shown by the broken line position of the means 31 in FIG. 2. The motor shaft rotates the holder 26 and chalk 25 therein for a predetermined time. Ten seconds has been selected as a suitable period of time for effective chalking of a cue. When the cue has been in contact with the rotated chalk for the predetermined time, the motor 20 automatically is de-energized. When the cue has been withdrawn through the opening 18, the starter 31 automatically returns to the solid line position of FIG. 2.

FIG. 3 illustrates three of the chalker units 10 mounted in a wall plate 40 flush with a wall (not shown).

The hinged front panel 15 provides for access to the interior of the housing 10 for replacement of the chalk. The automatic stopping of the motor and rotation of the chalk and its holder at the end of a predetermined time period, such as ten seconds, prevents waste of the chalk and wear of the motor notwithstanding failure of the player to withdraw the cue from the chalker. Although it is preferred to mount two or more of the units in a wall panel, individual units may be portable or wall mounted. Description of the details of construction of the motor and timer means has been dispensed with because they are available on the market and not claimed herein per se.

I claim:

1. A motor rotated and timed cue chalker comprising
  - a. a housing provided with a front panel having an opening therein,
  - b. a motor mounted in the housing having a shaft in axial alignment with the opening in the front panel,
  - c. chalk in a holder connected to the motor shaft in axial alignment between the motor and the opening in the front panel,
  - d. electrical switch means mounted in the housing having starter means electrically connected to the motor, said starter means having wiping contact with a cue inserted through the opening and activated by contact with said cue being inserted through the opening for contact with the chalk, and
  - e. timing means electrically connected to the motor positively operating the motor for a predetermined time after starting regardless of whether the cue has been withdrawn, and said timing means automatically stopping motor operation at said predetermined time regardless of whether the cue has been withdrawn from contact with the chalk or the switch starter.

2. The device defined by claim 1, in which the starter means is flexible and depends from a micro-switch mounted in the housing adjacent the front panel opening in the path of a cue being inserted through said opening.

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