Title (en)

Device for automatically discriminating die spot number

Title (de)

Vorrichtung zur automatischen Unterscheidung der Punktenzahl eines Würfels

Title (fr)

Dispositif de discrimination automatique du nombre de points sur un dé

Publication

EP 1103291 B1 20030226 (EN)

Application

EP 99309399 A 19991124

Priority

EP 99309399 A 19991124

Abstract (en)

[origin: EP1103291A1] A device is provided for automatically discriminating a spot number of an upward face of a die (1) with six faces. The device includes a signal transmitter (2) embedded in the dice (1) and a receiver device (3). The receiver device (3) includes a set of receiver and an operation computer. The signal transmitter (2) includes a substrate (21) embedded in the die (1) with respect to one of the six faces of the die (1). A sensor chip (26) is mounted on the substrate (21). The substrate (21) further includes four corner areas each having a conductive element (211,212,213,214) mounted thereon. Each mercury switch (22,23,24,25) extends upward and outward from and electrically connects to each conductive element in a manner that each mercury switch is at an angle of 15 DEG SIMILAR 75 DEG with the substrate (21). Each mercury switch (22,23,24,25) contains conductive mercury therein. The mercury in each mercury switch flows under gravity so as to be in one of a conductive status and a non-conductive status with respect to an associated conductive element, thereby generating a signal representing the status of the mercury switch. The operation computer discriminates the spot number of the upward face of the die (1) according to the signals representing the status of the mercury switches (22,23,24,25). <IMAGE>

IPC 1-7

A63F 9/04

IPC 8 full level

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CPC (source: EP)

A63F 9/0468 (2013.01); A63F 2250/0457 (2013.01)

Cited by

WO2009142505A1; DE102011014850A1; CN103678186A; DE102005040950B3; EP3761164A1; US8682947B2; WO2021004965A1

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