

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 14

UNITED STATES PATENT AND TRADEMARK OFFICE

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Ex parte EDWARD J. MANCUSO

Appeal No. 2004-1251
Application No. 09/972,658

ON BRIEF

Before COHEN, FRANKFORT and BAHR, Administrative Patent Judges.
BAHR, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1-5, which are all of the claims pending in this application.

We REVERSE.

BACKGROUND

The appellant's invention relates generally to the field of casino gaming and more particularly to an apparatus and method for verifying the identification of a die, to reduce the probability of cheating. The method and apparatus utilize a die provided with a bar

code on a face thereof and a scanner operable to scan the face to verify the presence of the bar code. A copy of the claims under appeal is set forth in the appendix to the appellant's brief.

The examiner relied upon the following prior art references in rejecting the appealed claims:

Jenkins et al. (Jenkins)	4,707,251	Nov. 17, 1987
Onzo	5,150,900	Sep. 29, 1992
Sity et al. (Sity)	6,331,145	Dec. 18, 2001
		(§ 102(e) date Feb. 28, 2000)

The following rejections are before us for review.

Claims 1-3 and 5 stand rejected under 35 U.S.C. § 103 as being unpatentable over Jenkins in view of Sity.

Claim 4 stands rejected under 35 U.S.C. § 103 as being unpatentable over Jenkins in view of Sity and Onzo.¹

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellant regarding the above-noted rejections, we make reference to the answer (Paper No. 10) for the examiner's complete reasoning in support of the rejections and to the brief and reply brief (Paper Nos. 9 and 11) for the appellant's arguments thereagainst.

¹ As should be apparent from our discussion, *infra*, the basis of the examiner's rejection appears to rely on Sity as the primary reference. In any event, it is clear that the examiner's rejection of claims 1-3 and 5 is based on the combined teachings of Jenkins and Sity and the rejection of claim 4 is based on the combined teachings of Jenkins, Sity and Onzo.

OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellant's specification and claims, to the applied prior art references, and to the respective positions articulated by the appellant and the examiner. As a consequence of our review, we make the determinations which follow.

We turn first to the rejection of claims 1-3 and 5 as being unpatentable over Jenkins in view of Sity. Independent claims 1 and 5 require, inter alia, a die and a bar code strip carrying a representation of a verification character connected to or embedded in a face of the die. Claims 2 and 3 depend from claim 1.

Jenkins discloses a container scanning and accounting method for use in a system for recycling used beverage containers wherein scanners 24 read a UPC or bar code on a container, the UPC or bar code identifying the brand and type of beverage container. The information read by each of the scanners 24 is output to a computer for processing. The computer maintains tallies for each batch of the types and brands of containers processed so that appropriate reimbursements can be made by each bottler, manufacturer or distributor for deposits refunded by each retailer to consumers for containers.

Sity discloses an electronic die having n faces, with at least $n-1$ of the faces being provided with sensors indicating to a processor or computer which face of the die is facing upward. This can be accomplished, for example, using optical sensors, with

the sensor of each exposed face transmitting a "1" signal and the sensor of the face lying down against the playing surface transmitting a "0" signal, thereby indicating which face is the uppermost face (i.e., the face opposite the one with a sensor transmitting a "0" signal). Alternatively, RFID (Radio Frequency Identification) transponders or tags could also be used. If a metal playing surface is used, the RFID tag of the face lying against the playing surface will not transmit a signal, thereby indirectly identifying the uppermost face. In a further feature of the invention which protects the electronic die from being illegally copied, each RFID tag within the die is configured with its own ID code which is compared with a code transmitted by the computer. It is thus possible to check the legality or originality of the particular die and whether the game or software application using the die is a copy or an original. See column 5, line 66, to column 6, line 8. Sity also discloses the use of a CCD (charge coupled device) camera embedded into the playing surface which photographs the face landing face down on the playing surface. In column 6, lines 53-60, Sity teaches that

[i]t will be appreciated by persons knowledgeable in the art, that the type of read/write unit 14 utilized will be determined by the type of dice and the method of transmission. For instance, as in the preferred embodiment, the dice and the read/write unit 14 will be based on a similar RFID technology. Similarly, if the dice uses infra-red technology for transmission then the read/write unit 14 will of course be configured to receive infra-red technology.

It is thus apparent that Sity contemplates that different types of sensors other than the ones specifically enumerated therein may be suitable for use with the disclosed electronic dice system.

Jenkins quite apparently differs from the invention recited in claims 1 and 5 in that the object carrying a bar code is not a die. Sity discloses a die having sensors installed in the faces thereof, including sensors configured with ID codes which are compared with a code transmitted by the computer to prevent illegal or fraudulent copying of the die or the software with which the die is used. Sity, however, lacks a teaching of the sensor being a bar code strip as called for in claims 1 and 5.

It is the examiner's position (answer, page 3) that it would have been obvious in view of the combined teachings of Jenkins and Sity "to modify the die of Sity so that it uses a bar code on the die as a more inexpensive way to verify/identify information regarding the die." Appellant argues on pages 5 and 6 of the brief that the sensors of Sity cannot be replaced by a bar code and still perform their function of determining the numbers of the faces that are face up and face down and that, in any event, "[t]he use of the bar code strip in dice is only obvious with hindsight gained from Appellant's disclosure" (brief, page 6).

Even assuming, arguendo, that bar code strips could be used in the Sity device to perform the dual function of authentication and indicating which die face is facing upward after a toss of the die, we find nothing in the teachings of Sity or Jenkins which

would have suggested the use of a bar code as the “sensor” in Sity’s die. The mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification. See In re Mills, 916 F.2d 680, 682, 16 USPQ2d 1430, 1432 (Fed. Cir. 1990); In re Gordon, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984). The types of sensors discussed by Sity are sensors which are designed to transmit either a “0” or “1” signal depending on whether the face in which the particular sensor is installed faces the playing surface or is exposed to perform the function of indicating which die face faces upward. One of ordinary skill in the art would not have readily envisaged bar code strips as being such sensors and there is nothing in the teachings of Jenkins of the use of bar codes for identifying brand and type of container on beverage containers in recycling systems which would have suggested their use in Sity’s die. Thus, we, like appellant, reach the conclusion that the examiner’s rejection of claims 1-3 and 5 stems from impermissible hindsight reconstruction² and cannot be sustained.

Claim 4 is directed to a method of providing a die with a verifiable identity to a casino comprising, inter alia, the steps of manufacturing the die with a face connected to a bar code strip. Finding nothing in Onzo which cures the above-noted deficiency in

² Rejections based on 35 U.S.C. § 103 must rest on a factual basis. In making such a rejection, the examiner has the initial duty of supplying the requisite factual basis and may not, because of doubts that the invention is patentable, resort to speculation, unfounded assumptions or hindsight reconstruction to supply deficiencies in the factual basis. In re Warner, 379 F.2d 1011, 1017, 154 USPQ 173, 178 (CCPA 1967), cert. denied, 389 U.S. 1057 (1968).

the combination of Jenkins and Sity, it follows that we also cannot sustain the examiner's rejection of claim 4 as being unpatentable over Jenkins in view of Sity and Onzo.³

³ It is also worthy of note that Onzo, directed to a heptahedron random character selector having as one of its components an indicia-marked sheet 14 either inserted into the periphery of the body 3, with subsequent insertion of the core member 37 or, alternatively, wrapped about a core member to form a sub-assembly, the sub-assembly then being inserted into the interior periphery of the body 3, provides no teaching or suggestion whatsoever to provide a wrapper with a verification character printed on its interior surface and to seal Sity's die in the wrapper so that only an outer surface of the wrapper is exposed to view, as also called for in claim 4.

CONCLUSION

To summarize, the decision of the examiner to reject claims 1-5 under 35 U.S.C. § 103 is reversed.

REVERSED

IRWIN CHARLES COHEN
Administrative Patent Judge

CHARLES E. FRANKFORT
Administrative Patent Judge

JENNIFER D. BAHR
Administrative Patent Judge

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