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Table with 5 columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO. Includes application details for Hiroto Sasaki and examiner information for GORDEN, RAEANN.

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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* HIROTO SASAKI

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Appeal 2011-001224  
Application 11/037,040  
Technology Center 3700

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Before EDWARD A. BROWN, ANNETTE R. REIMERS and  
WILLIAM A. CAPP, *Administrative Patent Judges*.

REIMERS, *Administrative Patent Judge*.

DECISION ON APPEAL

### STATEMENT OF THE CASE

Hiroto Sasaki (Appellant) appeals under 35 U.S.C. § 134 from the Examiner's decision to reject under 35 U.S.C. § 103(a) claims 9, 17-19, 21, 23, 25-28, 30-32, 34, 36, 38, 40, 42 and 44-48 as unpatentable over Kodera (US 2002/0065567 A1, published May 30, 2002) and Sullivan (US 6,159,110, issued Dec. 12, 2000). Claim 16 has been withdrawn from consideration. Claims 1-8, 10-15, 20, 22, 24, 29, 33, 35, 37, 39, 41 and 43 have been canceled. We have jurisdiction over this appeal under 35 U.S.C. § 6(b). An oral hearing was conducted on January 11, 2013.

We AFFIRM.

### THE INVENTION

Appellant's invention relates to a golf ball including an IC chip incorporated therein. Spec. 3, ll. 20-21 and figs. 1 and 3.

Claims 9 and 17 are illustrative of the claimed invention and read as follows:

9. A golf ball comprising:
  - an IC chip which can output data;
  - a homogenous solid core; and
  - a one piece cover member surrounding said solid core,wherein said IC chip is embedded inside said solid core, wherein said solid core comprises:
  - a solid core inner member; and
  - an intermediate cover layer formed around said solid core inner member;wherein said IC chip is embedded adjacent to said solid core inner member.
  
17. A golf ball comprising:
  - an IC chip which can output data; and
  - a homogenous solid core; and

wherein said IC chip is embedded inside said solid core;  
wherein said data comprises at least one of manufacture history,  
shot history and flight properties,  
wherein the IC chip is a tiny thin piece of about 0.4 mm square.

## OPINION

*Claims 9, 21, 23, 28, 34, 38, 42, 47 and 48*

Appellant indicates that claims 21, 23, 28, 34, 38, 42, 47 and 48 stand or fall with the rejection of independent claim 9. App. Br. 11. Accordingly, we review this ground of rejection on the basis of claim 9. *See* 37 C.F.R. § 41.37(c)(1)(vii)(2011).

Independent claim 9 requires “wherein said IC chip is embedded *adjacent* to said solid core inner member.” App. Br., Claims Appendix (italics added). Appellant argues that “[t]his feature is not taught, suggested or even contemplated by any of the references cited in the present rejection.” App. Br. 9. Specifically, according to Appellant, “Kodera clearly locates the IC chip at the center of the golf ball. *See* Kodera (sic.) para. [0043]. As a result, Kodera fails to disclose an IC chip adjacent to said solid core inner member. Sullivan fails to disclose any IC chip.” *Id.* Appellant takes the position that “if Kodera and Sullivan are combined, one of ordinary skill in the art would be driven to place Kodera’s IC chip within the center of Sullivan’s core 10. As such, the core 10 [of Sullivan] would completely surround the IC chip,” which is in contrast to “the IC chip [being] embedded adjacent to said solid core inner member,” as required by claim 9. App. Br. 11.

The Examiner found that (1) Kodera discloses a golf ball including an IC chip located at the center of the ball, but Kodera fails to disclose a plurality of layers in the golf ball; and (2) Sullivan discloses a golf ball

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including a plurality of layers (e.g., a homogenous solid core, an intermediate layer and a cover). Ans. 3-4. The Examiner further reasoned that (1) the term “embedded adjacent to the solid core inner member” constitutes that the IC chip is “nearby the solid core inner member;” and (2) the IC chip may be located “‘adjacent’ to the outside surface of the solid core inner member.” Ans. 5-6. In other words, based on our understanding, the Examiner took the position that “[t]he IC chip [of Kodera] may be embedded adjacent to the solid core inner member [of the golf ball of Sullivan],” as required by claim 9. Ans. 5.

In the instant case, Appellant proposes to place a known, off-the-shelf, commercially available IC chip with a width of about 0.4 mm into a golf ball that is commonly understood to be substantially spherical in shape and have a radius of only about 21 mm. Spec. 6, 8. The Examiner found Kodera already discloses locating an IC chip at the geometric center of the golf ball. Thus, a person of ordinary skill in the art would have known that an IC chip could be placed anywhere within the interior of the golf ball without concerns regarding whether the thickness of the material surrounding the IC chip would adversely affect the ability of the chip to transmit and receive data. Appellant’s Specification does not appear to disclose any advantage or unexpected result provided by the claimed location of the IC chip. *See* Spec. 8-9. The Examiner observed that it would be obvious to try various locations for the IC chip within the golf ball. Ans. 6. The Examiner’s position is buttressed by the fact that Appellant’s Specification is silent as to the radius of the core inner member, thus, “adjacent” the core inner member could be almost anywhere inside the outer cover of the golf ball depending on the relative dimensions of the core inner and intermediate members.

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Appellant has offered neither evidence nor persuasive argument to challenge the correctness of the Examiner's position.

Under the circumstances, Appellant's assertions regarding the combination of Koderer and Sullivan fail to persuasively explain *why* it would not have been obvious to modify Koderer by locating the IC chip at some location other than the geometric center of the golf ball, adjacent to the solid core inner member of the golf ball of Sullivan, as proposed by the Examiner, being one obvious alternative. Accordingly, Appellant has not apprised us of error in the Examiner's conclusion. We therefore sustain the rejection of independent claim 9 and of claims 21, 23, 28, 34, 38, 42, 47 and 48, which fall with claim 9.

*Claims 17-19, 25-27, 30-32, 36, 40 and 44-46*

Appellant argues claims 17, 18 and 19 as a group and indicates that claims 25-27, 30-32, 36, 40 and 44-46 stand or fall with claims 17, 18, and 19. App. Br. 11-13. We select claim 17 as the representative claim. *See* 37 C.F.R. § 41.37(c)(1)(vii)(2011).

Independent claim 17 requires an IC chip of about 0.4 mm square. App. Br., Claims Appendix. The Examiner found that Koderer fails to disclose the size of the IC chip. Ans. 4. However, the Examiner reasoned that (1) "IC chips are used in almost all electronic equipment and vary in size depending upon its host;" and (2) "[c]hoosing an IC chip of approximately 4 mm [square] [for a golf ball] is within the capabilities of one skilled in the art." Ans. 6-7. The Examiner concluded that varying the size of an IC chip of a golf ball is an obvious design choice. Ans. 4, 6-7.

Appellant argues that "the size of the IC chip is not a mere design choice, but instead, a variable which impacts the flight performances of a

golf ball and the other properties (transmission and reception) associated with communication.” App. Br. 13; Reply Br. 7.<sup>1</sup> The question is not whether the size of the claimed IC chip has a function. The proper question is whether there is a difference in function between the claimed IC chip and Kodera’s IC chip. *See In re Chu*, 66 F.3d 292, 298-99 (Fed. Cir. 1995) (“design choice” is appropriate where the applicant fails to set forth any reasons why the differences between the claimed invention and the prior art would result in a different function or give unexpected results) (citations omitted).

As correctly pointed out by the Examiner, Kodera’s IC chip (1) “is embedded within the golf ball and is used for golfing;” and (2) “contains identification information,” as required by the claims. Ans. 4, 6; Kodera paras.[0043] and [0044] and fig. 2. Consequently, Kodera’s IC chip differs from the IC chip of claim 17 only in that Kodera does not explicitly disclose the size of the IC chip. Appellant fails to establish any criticality or unexpected results achieved by the claimed IC chip having a size of about 0.4 mm square. *See Spec. 6*, ll. 10-11. As such, the difference between Kodera’s IC chip and the claimed IC chip having a specific size fails to demonstrate the non-obviousness of independent claim 17. We fail to see, and Appellant has failed to articulate, how a golf ball embedded with an IC chip of about 0.4 mm square, as called for in independent claim 17, differs in function from a golf ball embedded with the IC chip of Kodera. We therefore sustain the rejection of independent claim 17 and of claims 18, 19, 25-27, 30-32, 36, 40 and 44-46, which fall with claim 17.

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<sup>1</sup> It bears mention that Appellant’s Specification states that: “The IC chip may be any of well-known IC chips, for example, available under the trade name of ‘ $\mu$ -Chip’ from Hitachi, Ltd.” *Spec. 8*, ll. 19-21.

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DECISION

The decision of the Examiner is affirmed as to claims 9, 17-19, 21, 23, 25-28, 30-32, 34, 36, 38, 40, 42 and 44-48.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED

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