

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for publication and is not binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* JUNJI HAYASHI, HISASHI YAMAGISHI, YASUMASA SHIMIZU and  
YASUSHI ICHIKAWA

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Appeal No. 2006-0480  
Application No. 10/318,260

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ON BRIEF

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Before OWENS, LEVY and NAPPI, *Administrative Patent Judges*.  
OWENS, *Administrative Patent Judge*.

*DECISION ON APPEAL*

This appeal is from a rejection of claims 1, 3, 4 and 6-12.  
Claim 5, which is the only other pending claim, stands objected to  
as dependent upon a rejected base claim but allowable if rewritten  
in independent form.

*THE INVENTION*

The appellants claim a golf ball having a cover made from a blend that includes a silicone powder having an average particle size of 0.7 to 700  $\mu\text{m}$ . Claim 1 is illustrative:

1. A multi-piece golf ball comprising:

a core having a diameter of 30 to 40 mm, said core being made from a rubber composition mainly containing polybutadiene;

at least one intermediate layer including the outermost layer having a thickness of 0.5 to 2.0 mm, said outermost layer being made from a resin material containing an ionomer resin in an amount of 30% by weight or more; and

a cover having a thickness of 0.5 to 2.0 mm, said cover being made from a material obtained by dispersedly blending at least one kind of silicone powder selected from a silicone rubber powder, a silicone resin powder, and a composite powder thereof, in a main resin component containing an ionomer resin in an amount of 50% by weight or more; wherein

the hardness of said outermost layer of said at least one intermediate layer is harder than the hardness of a center portion of said core, the hardness of said cover is harder than the hardness of said outermost layer of said at least one intermediate layer, and a difference in hardness between said cover and the center portion of said core satisfies a relation of  $10 \leq \text{Durometer D hardness of cover} - \text{Durometer D hardness of center portion of core} \leq 40$ , and

an average particle size of said silicone powder is a range of 0.5 to 700  $\mu\text{m}$ .

*THE REFERENCES*

|                            |           |                       |
|----------------------------|-----------|-----------------------|
| Endo et al. (Endo)         | 6,520,872 | Feb. 18, 2003         |
|                            |           | (filed Oct. 25, 2001) |
| Takemura et al. (Takemura) | 6,688,992 | Feb. 10, 2004         |
|                            |           | (filed Aug. 24, 2001) |

*THE REJECTION*

Claims 1, 3, 4 and 6-12 stand rejected under 35 U.S.C. § 103 as being unpatentable over Endo in view of Takemura.

*OPINION*

We reverse the aforementioned rejection. We need to address only claim 1, which is the sole independent claim. Claim 1 requires that a blend from which a golf ball cover is made includes a silicone rubber powder, a silicone resin powder or a mixture thereof, wherein the average particle size of the silicone powder is 0.5 to 700  $\mu\text{m}$ . For that claim requirement the examiner relies upon Takemura (answer, page 5).

Takemura discloses a golf ball having a cover made from a blend comprising organic short fibers having a length of 5-1000  $\mu\text{m}$  (col. 1, lines 55-59; col. 5, lines 26-27). The organic short fibers "may include nylon fiber, acrylic fiber, polyester fiber, aramid fiber and others" (col. 5, lines 1-3). "[I]t is possible to premix a prescribed amount of the organic short fiber in polymer of

rubber or the like to obtain organic short fiber-reinforced polymer, which can be kneaded into the cover base material" (col. 5, lines 53-55). The disclosed polymers include silicone rubber (col. 5, lines 58-63).

The examiner argues that "Takemura et al. notes that the silicone rubber is premixed with an organic short fiber, therefore, it is submitted that the silicone rubber has a particle size of 5 to 1000 $\mu\text{m}$  (See Column 5, lines 25 through 67 and Column 6, lines 1 through 4)" (answer, page 5). The relied-upon portion of Takemura discloses that the organic short fibers have a length of 5-1000  $\mu\text{m}$ , but does not disclose that the silicone rubber is in powder form.

The examiner argues (answer, page 7):

Takemura et al. discloses the organic fibers being premixed with a silicone rubber. The organic fibers are of the same size as that of the particles claimed by the applicant, thus making the fibers inherently powder. In summary, Takemura et al. teaches a premixed silicone powder having a particle size of 5 to 1000 $\mu\text{m}$ . The word "powder" is a term which is further defined by the size of the particle. Takemura et al. does not have to explicitly state "powder" in order to meet the claim limitation. Furthermore, it should be noted that the claim does not require the silicone powder to be purely silicone rubber powder.

The examiner apparently assumes that Takemura's disclosure that 5-1000 $\mu\text{m}$  organic short fibers are blended with silicon rubber indicates that the silicon rubber is in the form of particles

having the same size as the organic fibers. That assumption is not supported by Takemura's disclosure. Takemura merely discloses premixing organic short fibers with a polymer, which can be silicone rubber, to obtain organic fiber-reinforced polymer which can be kneaded into the cover base material (col. 5, lines 52-55).

For the above reasons we conclude that the examiner has not carried the burden of establishing a *prima facie* case of obviousness of the appellants' claimed invention.

*DECISION*

The rejection of claims 1, 3, 4 and 6-12 under 35 U.S.C. § 103 over Endo in view of Takemura is reversed.

*REVERSED*

TERRY J. OWENS )  
Administrative Patent Judge )  
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 ) BOARD OF PATENT  
STUART S. LEVY ) APPEALS  
Administrative Patent Judge ) AND  
 ) INTERFERENCES  
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ROBERT E. NAPPI )  
Administrative Patent Judge )

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