

Title (en)
Multi-piece solid golf ball

Title (de)
Mehrteiliger, fester Golfball

Title (fr)
Balle de golf solide en plusieurs pièces

Publication
EP 0897732 A2 19990224 (EN)

Application
EP 98306409 A 19980811

Priority
JP 22890297 A 19970811

Abstract (en)

A multi-piece solid golf ball is provided which is improved in spin, feeling, and durability, prevents its trajectory from rising or dropping, and offers an increased flight distance. A multi-piece solid golf ball comprising a solid core and a cover having an inner and an outer layer surrounding the core wherein the outer cover layer has a surface formed with a plurality of dimples is characterized in that a product of the Shore D hardness of the inner cover layer multiplied by the Shore D hardness of the outer cover layer and a proportion VR (%) of the total of the volumes of dimple spaces each defined below a plane circumscribed by the dimple edge to the overall volume of a phantom sphere given on the assumption that the golf ball surface is free of dimples satisfy any one of the following combinations (1) to (5): (1) the product of Shore D hardnesses of inner and outer cover layers: 1,500 to less than 2,000 VR: 0.8 to 1.1% (2) the product of Shore D hardnesses of inner and outer cover layers: 2,000 to less than 2,500 VR: 0.75 to 1.05% (3) the product of Shore D hardnesses of inner and outer cover layers: 2,500 to less than 3,000 VR: 0.7 to 1% (4) the product of Shore D hardnesses of inner and outer cover layers: 3,000 to less than 3,500 VR: 0.65 to 0.95% (5) the product of Shore D hardnesses of inner and outer cover layers: 3,500 to 4,000 VR: 0.6 to 0.9%, and the dimples include at least three types of dimples which are different in at least one of a diameter, a depth, and a value V0 which is the volume of one dimple space defined below a plane circumscribed by the dimple edge divided by the volume of a cylinder whose bottom is the plane and whose height is the maximum depth of the dimple from the bottom. <IMAGE>

IPC 1-7
A63B 37/00

IPC 8 full level
A63B 37/00 (2006.01); **A63B 37/04** (2006.01); **A63B 37/12** (2006.01)

CPC (source: EP US)
A63B 37/0003 (2013.01 - EP); **A63B 37/00215** (2020.08 - EP US); **A63B 37/0016** (2013.01 - EP); **A63B 37/0019** (2013.01 - EP);
A63B 37/002 (2013.01 - EP); **A63B 37/0031** (2013.01 - EP); **A63B 37/0075** (2013.01 - EP); **A63B 37/12** (2013.01 - EP)

Cited by
EP1191981A4; US6910975B2; US7148290B2; US6726579B2; US6843735B2; US6852045B2

Designated contracting state (EPC)
DE FR GB

DOCDB simple family (publication)
EP 0897732 A2 19990224; **EP 0897732 A3 20010606**; **EP 0897732 B1 20081231**; DE 69840396 D1 20090212; JP H1157067 A 19990302

DOCDB simple family (application)
EP 98306409 A 19980811; DE 69840396 T 19980811; JP 22890297 A 19970811