

Title (en)  
GOLF BALL

Title (de)  
GOLFBALL

Title (fr)  
BALLE DE GOLF

Publication  
**EP 4218963 A1 20230802 (EN)**

Application  
**EP 23151334 A 20230112**

Priority  
JP 2022013356 A 20220131

Abstract (en)  
A golf ball 2 having excellent flight performance upon a shot with a fairway wood is provided. The golf ball 2 has a large number of dimples 8 on a surface thereof. A trajectory of the golf ball 2 calculated under conditions of an initial speed of 260 ft/s, a launch angle of 15.0 degrees, and an initial backspin rate of 3000 rpm satisfies the following mathematical formula.  $A_{min} \geq -5.0 \cdot V_{ave} - 38.98$ , wherein  $A_{min}$  represents a minimum value (degree) of a vector angle A in the trajectory, and  $V_{ave}$  represents an average volume ( $\text{mm}^3$ ) of the dimples 8. The vector angle A is calculated by the following mathematical formula.  $A = \text{ATAN}(V_y/V_x)$ , wherein  $V_x$  represents a horizontal component of a speed of the golf ball 2, and  $V_y$  represents a vertical component of the speed of the golf ball 2.

IPC 8 full level  
**A63B 37/00** (2006.01); **A63B 24/00** (2006.01); **A63B 47/00** (2006.01)

CPC (source: EP KR US)  
**A63B 37/0006** (2013.01 - KR US); **A63B 37/0012** (2013.01 - KR); **A63B 37/0016** (2013.01 - EP); **A63B 37/0017** (2013.01 - KR); **A63B 37/0018** (2013.01 - EP KR US); **A63B 37/002** (2013.01 - KR); **A63B 37/0021** (2013.01 - KR); **A63B 37/00215** (2020.08 - US); **A63B 37/0084** (2013.01 - EP); **A63B 37/0089** (2013.01 - KR); **A63B 37/009** (2013.01 - KR); **A63B 37/0006** (2013.01 - EP); **A63B 37/0012** (2013.01 - EP US); **A63B 37/0019** (2013.01 - EP); **A63B 37/002** (2013.01 - EP); **A63B 37/0021** (2013.01 - US); **A63B 37/0074** (2013.01 - US); **A63B 47/008** (2013.01 - EP); **A63B 2024/0034** (2013.01 - EP)

Citation (applicant)  
• JP 2014140638 A 20140807 - DUNLOP SPORTS CO LTD  
• "Science and Golf IV, Chapter 30, A Generally Applicable Model for the Aerodynamic Behavior of Golf Balls", 2002, article "S. J. Quintavalla of the United States Golf Association and disclosed"

Citation (search report)  
[X] JP 2003210613 A 20030729 - SUMITOMO RUBBER IND

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA

Designated validation state (EPC)  
KH MA MD TN

DOCDB simple family (publication)  
**EP 4218963 A1 20230802**; JP 2023111481 A 20230810; KR 20230117511 A 20230808; US 2023241460 A1 20230803

DOCDB simple family (application)  
**EP 23151334 A 20230112**; JP 2022013356 A 20220131; KR 20230002778 A 20230109; US 202318103509 A 20230131