# :IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF MASSACHUSETTS

ACUSHNET COMPANY,	)
Plaintiff,	) Civil Action No
v.	)
	)
ZIMVENTURES, LLC d/b/a 3 UP GOLF,	) JURY TRIAL DEMANDED
DIXON GOLF, INC., KICK X GOLF	)
CORPORATION d/b/a KICK X SPORTS,	)
LIGHTNING GOLF, MONSTA GOLF LLC,	)
RIFE GOLF, VAIL ROBERTS, LLC d/b/a I	)
NEED THE BALL, VICE SPORTING	)
GOODS GMBH d/b/a VICE GOLF, NEXEN	)
CORP. d/b/a SAINTNINE and ARIVA	)
GOLF.	)
	)
Defendants.	)

### **COMPLAINT**

Plaintiff Acushnet Company ("Acushnet"), through its attorneys, for its complaint against Defendants Zimventures, LLC d/b/a 3 Up Golf ("3 Up"), Dixon Golf, Inc. ("Dixon"), Kick X Golf Corporation d/b/a Kick X Sports ("Kick X"), Lightning Golf ("Lightning"), Monsta Golf ("Monsta"), Rife Golf ("Rife"), Vail Roberts, LLC d/b/a I Need The Ball ("Vail Roberts"), Vice Sporting Goods GmbH d/b/a Vice Golf ("Vice"), Nexen Corporation d/b/a SaintNine ("Nexen") and Ariva Golf ("Ariva") (collectively "Defendants") for infringement of U.S. Patents Nos. 6,923,736 ("the '736 patent"), 7,491,137 ("the '137 patent"), and 7,226,369 ("the '369 patent") (collectively "the Patents-In-Suit"), and against Ariva for infringement of U.S. Patents Nos. 8,360,902 ("the '902 patent") and 8,465,381 ("the '381 patent"), alleges as follows:

#### **PARTIES**

 Acushnet Company is a Delaware corporation with its headquarters located at 333 Bridge Street, Fairhaven, Massachusetts 02719.

- 2. On information and belief, Zimventures, LLC is a limited liability company with its principal place of business at 3 Tracey Avenue, Nashua, New Hampshire 03063. Zimventures sells golf balls under the trade name "3 Up Golf."
- 3. On information and belief, Dixon Golf, Inc. is a corporation with its principal place of business at 200 East 5th Street, Tempe, Arizona 85281.
- 4. On information and belief, Kick X Golf Corporation is a corporation with its principal place of business at 929 Poinsettia Avenue, Suite 102, Vista, California 92081.
- 5. On information and belief, Lightning Golf is a business organization with its principal place of business at 201 Commercial Avenue, Suite 11, Palisades Park, New Jersey 07650.
- 6. On information and belief, Monsta Golf LLC is a Massachusetts limited liability company with its principal place of business at 1 Rose Lane, Ayer, Massachusetts 01432.
- 7. On information and belief, Rife Golf is a business organization with its principal place of business at 13620 NE 20th Street, Suite Q, Bellevue, Washington 98005. On information and belief, Rife Golf purchased Innovex, which sold golf balls under the trade name "V Motion", and Rife also sells golf balls under the trade name "V Motion".
- 8. On information and belief, Vail Roberts, LLC is a Massachusetts limited liability company with its principal place of business at 182 Beacon Street #5, Boston, Massachusetts 02116. Vail Roberts sells golf balls in the United States under the trade names "I Need The Ball" or "The Ball."

- 9. On information and belief, Vice Sporting Goods GmbH is a German corporation with its principal place of business at Occamstr. 21, 80802 München, Germany. Vice sells golf balls in the United States under the trade name "Vice Golf."
- 10. On information and belief, Nexen Corporation is a South Korean corporation with its principal place of business at 262-14 An-Dong, Gimhae City, Keyeongsangnam-Do, Republic of Korea. Nexen sells golf balls in the United States under the trade name "SaintNine."
- 11. On information and belief, Ariva Golf is a business organization with its principal place of business at 1777 Johnson Avenue, San Luis Obispo, California 93401.

#### **JURISDICTION AND VENUE**

- 12. This is a civil action for patent infringement, injunctive relief, and damages arising under the patent laws of the United States, 35 U.S.C. §§ 1, *et seq*. This Court has exclusive subject matter jurisdiction over this case for patent infringement under 28 U.S.C. §§ 1331 and 1338(a).
- 13. Defendants Monsta Golf, LLC and Vail Roberts, LLC are Massachusetts limited liability companies with principal places of business in Massachusetts, and so are subject to general jurisdiction in Massachusetts.
- 14. Defendants have all purposefully and voluntarily placed one or more of their infringing products into the stream of commerce with the expectation that they will be purchased by consumers in the District of Massachusetts. These infringing products have been and continue to be purchased by consumers in the District of Massachusetts.
- 15. All Defendants have committed the tort of patent infringement within the Commonwealth of Massachusetts by selling infringing products to customers in

Massachusetts and directing advertisements for infringing products through the Internet to customers in Massachusetts. Therefore, this Court has personal jurisdiction over all Defendants.

- 16. Upon information and belief, all Defendants sell golf balls manufactured by the same Taiwanese company, and all such balls are made with the same dimple pattern that is relevant to the patent infringement alleged herein.
- 17. Venue is proper in the District of Massachusetts under 28 U.S.C. §§ 1391 and 1400(b).

# **THE PATENTS-IN-SUIT**

- 18. Acushnet is one of the world's leading companies in the business of inventing, manufacturing, and selling golf equipment. Among its many industry-leading products are golf balls sold under the Titleist brand name.
- 19. Golf balls typically employ dimple patterns on the outer casing of the ball.

  A particular dimple pattern can impact the aerodynamic properties of the ball, and can determine in part the extent to which lift and drag affect the flight of the ball.
- 20. When a golf ball is in flight, the air exerts drag and lift forces on the ball. Drag forces act opposite to the ball's direction of motion and slow the ball down, while lift forces act perpendicular to the ball's direction of motion and cause the ball to fly higher.
- 21. For an optimal golf ball trajectory, the goal is to develop a ball with an optimal balance of lift and drag forces, not merely to minimize drag while maximizing lift. A ball that simply maximizes lift risks flying too high, which can cause reduced accuracy and possibly reduced distance.

- 22. Around 2003, most golf balls had dimple patterns with about 390 to 440 dimples. It was a common belief in the golf ball industry and the golf community at that time that more dimples caused a ball to fly further.
- 23. As a result of extensive research, Acushnet discovered that fewer dimples and the use of certain dimple patterns could reduce both lift and drag, causing the ball to fly along a more penetrating ball flight.
- 24. Acushnet's discovery was incorporated into its Pro V1x golf ball. That ball had sixty fewer dimples than its predecessor, the Pro V1.
- 25. Acushnet applied for and received multiple patents based on its inventions.
- 26. Three of the patents that resulted from that work were U.S. Patents Nos. 6,923,736 ("the '736 patent"), 7,226,369 ("the '369 patent"), and 7,491,137 ("the '137 patent") (collectively, the "Patents-in-Suit"). Those patents are attached to this complaint as Exhibits 1, 2, and 3 respectively.
- 27. The inventions as disclosed in these patents "combine lower dimple coverage with multiple dimple sizes to provide higher dimple coverage and improved aerodynamic characteristics." Ex. 1 at Abstract.
- 28. Acushnet has manufactured, offered for sale and sold golf balls that embody the inventions disclosed and claimed in the '736, '369, and '137 patents. It currently sells the following models of golf ball embodying the patents-in-suit:

<u>Patent</u>	Golf Balls
'736	2015 Pro V1x, 2014 NXT Tour, 2014 NXT Tour S, 2014 Velocity, 2014 DT Solo, 2013 Pro V1X

'369	2015 Pro V1, 2015 Pro V1x, 2014 NXT Tour, 2014 NXT Tour S, 2014 Velocity, 2013 Pro V1, 2013 Pro V1x
'137	2015 Pro V1, 2015 Pro V1x, 2014 NXT Tour, 2014 NXT Tour S, 2014 Velocity, 2014 DT Solo, 2013 Pro V1, 2013 Pro V1x

- 29. Acushnet also has conducted extensive research into optimizing the composition of golf balls to improve spin and distance qualities.
- 30. Two patents resulting from Acushnet's research into golf ball composition are the '902 patent and the '381 patent. Those patents are attached as Exhibits 4 and 5 respectively.
  - 31. Acushnet is the sole owner by assignment of the Patents-in-Suit.
- 32. Acushnet's golf balls have at all times relevant hereto been marked with the numbers of the Patents-in-Suit, and Acushnet has achieved substantial commercial success with those golf balls.

#### THE ACCUSED PRODUCTS

- 33. Defendants all sell golf balls under different brand names with the same dimple pattern: a triangular dipyramid dimple pattern with 318 dimples in three different dimple sizes.
- 34. The golf balls sold by Defendants with this triangular dipyramid 318 dimple pattern (collectively "the Accused Products") are sold under the following brand names:

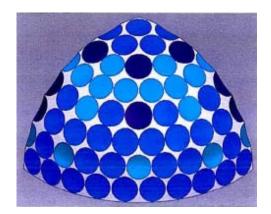
<u>Defendant</u>	Golf Ball Brand Name	
3 Up	3 Up 3F12	
Dixon	2010 Dixon Fire, 2012 Dixon Fire	

Kick X	Kick X Tour-Z
Lightning	Lightning HL3 Smack Daddy
Monsta	Monsta Golf Ball
Rife	2013 Innovex V-Motion, 2011 Innovex V-Motion, 2011 Innovex V-Motion Tour, Rife V Motion
I Need The Ball	The Ball
Vice	Vice Pro, Vice Pro Shooter K1X, Vice Pro Neon, Vice Pro Flamingo
Nexen	Saint Nine V
Ariva	Ariva Tour AR-4

- 35. All of the Accused Products are advertised for sale in the United States, and are offered for sale to customers in the United States.
- 36. On information and belief, the Accused Products are all made by the same manufacturer, with the same number of dimples, the same dimple pattern and the same dimple sizes.

### **DEFENDANT 3 UP'S ACCUSED PRODUCT**

- 37. 3 UP sells a golf ball under the brand name "3F12."
- 38. 3 UP advertises on its website that "[t]he 3F12 is a premium 3-piece golf ball that's built for the amateur golfer who doesn't want to compromise distance or feel. We started from the putting green and worked our way backwards to the tee to create this amazing feeling ball."
- 39. The 3F12 golf ball has a dimple pattern with 318 dimples arranged in a triangular dipyramid shape, shown by the figure below:



- 40. The 3F12 golf ball has 90 dimples with an approximate diameter of 0.159 inches (light blue in the above figure), 192 dimples with an approximate diameter of 0.168 inches (medium blue in the above figure), and 36 dimples with an approximate diameter of 0.179 inches (dark blue in the above figure). The dimples cover 78.5% of the golf ball's surface.
- 41. The 3F12 golf ball is a three-piece golf ball made in Taiwan. Its cover is composed of cast aromatic urethane, and its inner cover is composed of ionomer.
  - 42. The 3F12 golf ball has the following physical attributes:

Physical Attribute	Average Value for 3F12 Golf Ball	Range of Values for 3F12 Golf Ball
Diameter (in)	1.685	1.680 – 1.692
Weight (oz)	1.606	1.602 – 1.609
Compression	103	98 – 107
Cover Hardness (Shore C)	83.8	81.6 – 86.1
Cover Hardness (Shore D)	60.1	57.6 – 63.0
Cover Thickness (in)	0.038	
Inner Cover Hardness (Shore D)	71.4	69.0 – 72.6
Inner Cover Thickness	0.044	
Core Diameter (in)	1.520	1.518 – 1.523
Core Surface Hardness	51.2	47.6 – 54.6

(Shore D)		
Core Weight (oz)	1.225	1.222 – 1.229

### **DEFENDANT DIXON'S ACCUSED PRODUCT**

- 43. Dixon sells a golf ball under the brand name "Fire."
- 44. Dixon advertises on its website that "Dixon Fire is the multi-layer ecofriendly ball designed for the professional golfer who demands the highest level of performance in feel, spin, distance and durability."
- 45. Like the 3 UP 3F12, the Fire golf ball has a dimple pattern with 318 dimples arranged in a triangular dipyramid shape, shown by the figure below:



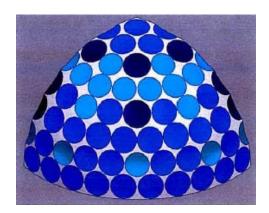
- 46. The Fire golf ball has 90 dimples with an approximate diameter of 0.160 inches (light blue in the above figure), 192 dimples with an approximate diameter of 0.167 inches (medium blue in the above figure), and 36 dimples with an approximate diameter of 0.181 inches (dark blue in the above figure). The dimples cover 78.3% of the golf ball's surface.
- 47. Like the 3 UP 3F12, the Fire golf ball is a three-piece golf ball made in Taiwan. Its cover is composed of cast aromatic urethane, and its inner cover is composed of ionomer.

48. The Fire golf ball has the following physical attributes:

Physical Attribute	Average Value for Fire Golf Ball	Range of Values for Fire Golf Ball
Diameter (in)	1.685	1.677 – 1.690
Weight (oz)	1.612	1.607 – 1.618
Compression	107	102 – 114
Cover Hardness (Shore C)	83.5	81.3 – 86.1
Cover Hardness (Shore D)	64.8	62.3 – 70.4
Cover Thickness (in)	0.039	
Inner Cover Hardness (Shore D)	73.1	71.3 – 74.2
Inner Cover Thickness	0.043	
Core Diameter (in)	1.520	1.518 – 1.524
Core Surface Hardness (Shore D)	56.6	54.1 – 60.6
Core Weight (oz)	1.230	1.228 – 1.236

### DEFENDANT KICK X'S ACCUSED PRODUCT

- 49. Kick X sells a golf ball under the brand name "Tour-Z."
- 50. Kick X advertises on its website that "[t]he TourZ will increase your shot distance and improve your play through its precision control. Advanced triple layered construction provides 'Tour Soft' feel and the ultimate in scoring performance. Secondly, the Tour Z's main core is constructed using Innovative Metal Fuzion Core technology to provide maximum C.O.R. delivering higher ball speeds for explosive distance."
- 51. Like the 3 UP 3F12 and the Dixon Fire, the Tour-Z golf ball has a dimple pattern with 318 dimples arranged in a triangular dipyramid shape, shown by the figure below:



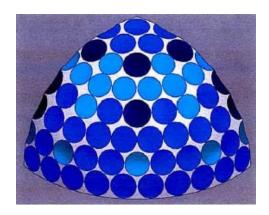
- 52. The Tour-Z golf ball has 90 dimples with an approximate diameter of 0.159 inches (light blue in the above figure), 192 dimples with an approximate diameter of 0.170 inches (medium blue in the above figure), and 36 dimples with an approximate diameter of 0.178 inches (dark blue in the above figure). The dimples cover 79.4% of the golf ball's surface.
- 53. Like the 3 UP 3F12 and the Dixon Fire, the Tour-Z golf ball is a three-piece golf ball made in Taiwan. Its cover is composed of cast aromatic urethane, and its inner cover is composed of ionomer.
  - 54. The Tour-Z golf ball has the following physical attributes:

Physical Attribute	Average Value for Tour-Z Golf Ball	Range of Values for Tour-Z Golf Ball
Diameter (in)	1.685	1.677 – 1.690
Weight (oz)	1.602	1.599 – 1.613
Compression	105	101 – 112
Cover Hardness (Shore C)	84.1	82.3 – 85.4
Cover Hardness (Shore D)	64.5	62.6 – 69.0
Cover Thickness (in)	0.039	
Inner Cover Hardness (Shore D)	73.5	71.6 – 74.8
Inner Cover Thickness	0.044	
Core Diameter (in)	1.521	1.518 – 1.526

Core Surface Hardness (Shore D)	54.2	51.2 – 58.2
Core Weight (oz)	1.222	1.215 – 1.228

# **DEFENDANT LIGHTNING'S ACCUSED PRODUCT**

- 55. Lightning sells a golf ball under the brand name "HL3 Smack Daddy," or just "HL3."
- 56. Lightning advertises the HL3 Smack Daddy golf ball on its website by telling customers, "Don't be a sheep and just play the same golf ball as everyone else. Try the HL3 and see what it can do for your game."
- 57. Like the 3 UP 3F12, the Dixon Fire and the Kick X Tour-Z, the HL3 golf ball has a dimple pattern with 318 dimples arranged in a triangular dipyramid shape, shown by the figure below:



58. The HL3 golf ball has 90 dimples with an approximate diameter of 0.156 inches (light blue in the above figure), 192 dimples with an approximate diameter of 0.168 inches (medium blue in the above figure), and 36 dimples with an approximate diameter of 0.180 inches (dark blue in the above figure). The dimples cover 77.9% of the golf ball's surface.

- 59. Like the 3 UP 3F12, the Dixon Fire and the Kick X Tour-Z, the HL3 golf ball is a three-piece golf ball made in Taiwan. Its cover is composed of cast aromatic urethane, and its inner cover is composed of ionomer.
  - 60. The HL3 golf ball has the following physical attributes:

Physical Attribute	Average Value for HL3 Golf Ball	Range of Values for HL3 Golf Ball
Diameter (in)	1.685	1.679 – 1.690
Weight (oz)	1.607	1.604 – 1.611
Compression	105	100 – 111
Cover Hardness (Shore C)	82.3	80.2 – 84.9
Cover Hardness (Shore D)	61.0	58.8 – 65.0
Cover Thickness (in)	0.038	
Inner Cover Hardness (Shore D)	72.2	71.2 – 73.0
Inner Cover Thickness	0.045	
Core Diameter (in)	1.519	1.516 – 1.524
Core Surface Hardness (Shore D)	52.1	50.2 – 55.6
Core Weight (oz)	1.223	1.217 – 1.227

### **DEFENDANT MONSTA'S ACCUSED PRODUCT**

- 61. Monsta sells a golf ball under the brand name "Monsta."
- 62. Monsta advertises on its website that "[w]e believe our 3 piece cast urethane golf ball is a 'premium performance golf ball *without* the premium price." (emphasis in original).
- 63. Like the 3 UP 3F12, the Dixon Fire, the Kick X Tour-Z and the Lightning HL3, the Monsta golf ball has a dimple pattern with 318 dimples arranged in a triangular dipyramid shape, shown by the figure below:



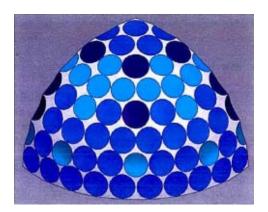
- 64. The Monsta golf ball has 90 dimples with an approximate diameter of 0.158 inches (light blue in the above figure), 192 dimples with an approximate diameter of 0.168 inches (medium blue in the above figure), and 36 dimples with an approximate diameter of 0.179 inches (dark blue in the above figure). The dimples cover 78.5% of the golf ball's surface.
- 65. Like the 3 UP 3F12, the Dixon Fire, the Kick X Tour-Z and the Lightning HL3, the Monsta golf ball is a three-piece golf ball made in Taiwan. Its cover is composed of cast aromatic urethane, and its inner cover is composed of ionomer.
  - 66. The Monsta golf ball has the following physical attributes:

Physical Attribute	Average Value for Monsta Golf Ball	Range of Values for Monsta Golf Ball
Diameter (in)	1.685	1.679 – 1.690
Weight (oz)	1.611	1.597 – 1.618
Compression	107	101 – 115
Cover Hardness (Shore C)	83.4	80.5 – 85.8
Cover Hardness (Shore D)	61.9	58.3 – 64.7
Cover Thickness (in)	0.037	
Inner Cover Hardness (Shore D)	72.2	71.0 – 73.2
Inner Cover Thickness	0.046	
Core Diameter (in)	1.518	1.515 – 1.521

Core Surface Hardness (Shore D)	53.8	49.4 – 56.6
Core Weight (oz)	1.225	1.221 – 1.231

## **DEFENDANT RIFE'S ACCUSED PRODUCT**

- 67. Rife sells a golf ball under the brand name "Rife V-Motion."
- 68. Rife also sells or sold golf balls under the brand name "Innovex V-Motion" and "Innovex V-Motion Tour." On information and belief, these balls share the same physical characteristics as the "Rife V-Motion" ball.
- 69. Rife advertises on its website that "[t]he V-Motion is a Tour quality, urethane ball made for golfers who want high-spin and great feel around the greens, as well as extreme distance off the tee."
- 70. Like the 3 UP 3F12, the Dixon Fire, the Kick X Tour-Z, the Lightning HL3 and the Monsta, the Rife V-Motion golf ball has a dimple pattern with 318 dimples arranged in a triangular dipyramid shape, shown by the figure below:



71. The Rife V-Motion golf ball has 90 dimples with an approximate diameter of 0.159 inches (light blue in the above figure), 192 dimples with an approximate diameter of 0.168 inches (medium blue in the above figure), and 36 dimples with an

approximate diameter of 0.179 inches (dark blue in the above figure). The dimples cover 78.5% of the golf ball's surface.

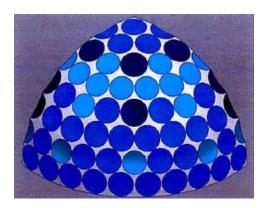
- 72. Like the 3 UP 3F12, the Dixon Fire, the Kick X Tour-Z, the Lightning HL3 and the Monsta, the Rife V-Motion golf ball is a three-piece golf ball made in Taiwan. Its cover is composed of cast aromatic urethane, and its inner cover is composed of ionomer.
  - 73. The Rife V-Motion golf ball has the following physical attributes:

Physical Attribute	Average Value for V-Motion Golf Ball	Range of Values for V-Motion Golf Ball
Diameter (in)	1.686	1.680 – 1.691
Weight (oz)	1.611	1.606 – 1.627
Compression	108	102 – 115
Cover Hardness (Shore C)	84.1	82.3 – 85.6
Cover Hardness (Shore D)	64.1	61.6 – 66.1
Cover Thickness (in)	0.039	
Inner Cover Hardness (Shore D)	75.2	73.8 – 76.6
Inner Cover Thickness	0.043	
Core Diameter (in)	1.520	1.515 – 1.526
Core Surface Hardness (Shore D)	53.1	49.0 – 56.2
Core Weight (oz)	1.226	1.220 – 1.236

#### DEFENDANT VAIL ROBERTS'S ACCUSED PRODUCT

- 74. Vail Roberts sells a golf ball under the brand name "The Ball."
- 75. Vail Roberts advertises on its website that it is "[i]ntroducing the only 3PC cast urethane ball with tungsten core technology on the market today. The Ball combines the makeup of a high-performance ball with the core of a distance ball. You get length with the addition of the Tungsten without losing the feel and spin.

76. Like the 3 UP 3F12, the Dixon Fire, the Kick X Tour-Z, the Lightning HL3, the Monsta and the Rife V-Motion, the Ball has a dimple pattern with 318 dimples arranged in a triangular dipyramid shape, shown by the figure below:



- 77. The Ball has 90 dimples with an approximate diameter of 0.158 inches (light blue in the above figure), 192 dimples with an approximate diameter of 0.168 inches (medium blue in the above figure), and 36 dimples with an approximate diameter of 0.180 inches (dark blue in the above figure). The dimples cover 78.4% of the golf ball's surface.
- 78. Like the 3 UP 3F12, the Dixon Fire, the Kick X Tour-Z, the Lightning HL3, the Monsta and the Rife V-Motion, the Ball is a three-piece golf ball made in Taiwan. Its cover is composed of cast aromatic urethane, and its inner cover is composed of ionomer.
  - 79. The Ball has the following physical attributes:

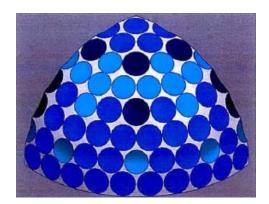
Physical Attribute	Average Value for The Ball	Range of Values for The Ball
Diameter (in)	1.685	1.678 – 1.690
Weight (oz)	1.602	1.598 – 1.605
Compression	104	98 – 110
Cover Hardness (Shore C)	85.4	83.6 – 87.0

Cover Hardness (Shore D)	65.0	60.3 – 66.6
Cover Thickness (in)	0.039	
Inner Cover Hardness (Shore D)	73.9	73.0 – 75.3
Inner Cover Thickness	0.044	
Core Diameter (in)	1.518	1.516 – 1.522
Core Surface Hardness (Shore D)	53.5	50.6 – 55.4
Core Weight (oz)	1.214	1.211 – 1.218

#### **DEFENDANT VICE'S ACCUSED PRODUCTS**

- 80. Vice Golf sells golf balls under the brand names "Vice Pro," "Vice Pro Shooter K1X," "Vice Pro Neon," and "Vice Pro Flamingo" (collectively, "the Vice Accused Products").
- 81. Vice Golf advertises on its website that its Vice Pro golf ball has "[e]xcellent green grabbing control due to our S2TG (Stick to the Green) technology, great spin rates and highly decelerating Urethane cover."
- 82. An article on the website golfwrx.com for which Vice Golf's founders were interviewed states that Vice Golf's founders took "about a year and a half from the conception of the company to when they sold their first batch of balls," and that they "collaborated with engineers at a technical university in Munich," and "went through hundreds of prototypes to get to the quality of ball they were looking for." The article quotes the founders as comparing the Vice Pro ball to the Titleist Pro V1, saying that it is "a three-piece model that is most useful for low handicappers and pros who want a ball that stops quickly and generates max spin in the short game."
- 83. Like the 3 UP 3F12, the Dixon Fire, the Kick X Tour-Z, the Lightning HL3, the Monsta, the Rife V-Motion and Vail Roberts' The Ball, the Vice Accused

Products all have dimple patterns with 318 dimples arranged in a triangular dipyramid shape, shown by the figure below:



84. The Vice Accused Products all have 90 dimples of Type 1 (light blue in the above figure), 192 dimples of Type 2 (medium blue in the above figure), and 36 dimples of Type 3 (dark blue in the above figure). The dimple diameter sizes and dimple coverage percentage for the four balls are given below:

	<u>Vice Pro</u>	<u>Vice Pro</u> <u>Shooter K1X</u>	<u>Vice Pro Neon</u>	<u>Vice Pro</u> <u>Flamingo</u>
Type 1 dimple diameter (in)	0.158	0.159	0.160	0.157
Type 2 dimple diameter (in)	0.170	0.168	0.170	0.169
Type 3 dimple diameter (in)	0.180	0.180	0.180	0.181
Dimple coverage	79.5%	78.6%	79.7%	78.8%

- 85. Like the 3 UP 3F12, the Dixon Fire, the Kick X Tour-Z, the Lightning HL3, the Monsta, the Rife V-Motion and Vail Roberts' The Ball, the Vice Accused Products are all three-piece golf balls made in Taiwan. They all have a cover composed of cast aromatic urethane, and an inner cover composed of ionomer.
  - 86. The Vice Accused Products have the following physical attributes:

Physical Attribute	Vice Pro Average	Vice Pro Shooter K1X Average	Vice Pro Neon Average	<u>Vice Pro</u> <u>Flamingo</u> <u>Average</u>
Diameter (in)	1.685	1.685	1.685	1.685
Weight (oz)	1.614	1.610	1.609	1.608
Compression	105	108	103	93
Cover Hardness (Shore C)	83.7	84.3	83.9	84.1
Cover Hardness (Shore D)	62.7	63.9	61.9	63.9
Cover Thickness (in)	0.039	0.039	0.039	0.038
Inner Cover Hardness (Shore D)	72.9	73.9	73.0	69.7
Inner Cover Thickness	0.043	0.043	0.043	0.044
Core Diameter (in)	1.520	1.520	1.520	1.520
Core Surface Hardness (Shore D)	51.9	55.7	50.1	48.0
Core Weight (oz)	1.230	1.227	1.227	1.228

# **DEFENDANT NEXEN'S ACCUSED PRODUCT**

- 87. Nexen sells a golf ball under the brand name "Saint Nine V."
- 88. Like the 3 UP 3F12, the Dixon Fire, the Kick X Tour-Z, the Lightning HL3, the Monsta, the Rife V-Motion, Vail Roberts' The Ball and the Vice Accused Products, the Saint Nine V golf ball has a dimple pattern with 318 dimples arranged in a triangular dipyramid shape, shown by the figure below:



- 89. The Saint Nine V golf ball has 90 dimples with an approximate diameter of 0.159 inches (light blue in the above figure), 192 dimples with an approximate diameter of 0.167 inches (medium blue in the above figure), and 36 dimples with an approximate diameter of 0.179 inches (dark blue in the above figure). The dimples cover 78.0% of the golf ball's surface.
- 90. Like the 3 UP 3F12, the Dixon Fire, the Kick X Tour-Z, the Lightning HL3, the Monsta, the Rife V-Motion, Vail Roberts' The Ball and the Vice Accused Products, the Saint Nine V is a three-piece golf ball made in Taiwan. Its cover is composed of cast aromatic urethane, and its inner cover is composed of ionomer.
  - 91. The Saint Nine V has the following physical attributes:

Physical Attribute	Average Value for Saint Nine V Golf Ball	Range of Values for Saint Nine V Golf Ball
Diameter (in)	1.685	1.683 – 1.688
Weight (oz)	1.613	1.611 – 1.618
Compression	105	102 – 109
Cover Hardness (Shore C)	84.8	83.7 – 85.5
Cover Hardness (Shore D)	62.9	59.8 – 68.5
Cover Thickness (in)	0.038	
Inner Cover Hardness (Shore D)	74.7	
Inner Cover Thickness	0.044	

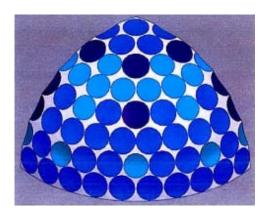
Core Diameter (in)	1.521	
Core Surface Hardness (Shore D)	52.2	
Core Weight (oz)	1.230	

### **DEFENDANT ARIVA'S ACCUSED PRODUCT**

- 92. Ariva sells a golf ball under the brand name "Tour AR-4."
- 93. Ariva advertises on its website that "[t]he concept of making the best golf ball on the planet was conceived while playing golf on the Central Coast of California.

  When my partner hit two golf balls in the water and said their [sic] goes a ten dollar bill.

  He stated someone needs to make a superior golf ball at an affordable price."
- 94. Like the 3 UP 3F12, the Dixon Fire, the Kick X Tour-Z, the Lightning HL3, the Monsta, the Rife V-Motion, Vail Roberts' The Ball, the Vice Accused Products and the Nexon Saint Nine V, the Tour AR-4 golf ball has a dimple pattern with 318 dimples arranged in a triangular dipyramid shape, shown by the figure below:

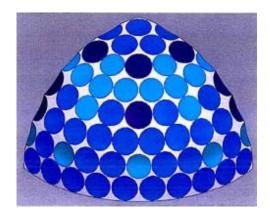


95. The Tour AR-4 golf ball has 90 dimples with an approximate diameter of 0.158 inches (light blue in the above figure), 192 dimples with an approximate diameter of 0.168 inches (medium blue in the above figure), and 36 dimples with an approximate diameter of 0.180 inches (dark blue in the above figure). The dimples cover 78.0% of the golf ball's surface.

96. The Tour AR-4 golf ball is a four-piece golf ball made in Taiwan. Like the 3 UP 3F12, the Dixon Fire, the Kick X Tour-Z, the Lightning HL3, the Monsta, the Rife V-Motion, Vail Roberts' The Ball, the Vice Accused Products and the Nexon Saint Nine V, the tour AR-4 cover is composed of cast aromatic urethane, and its inner cover is composed of ionomer.

### **SIMILARITIES OF DEFENDANTS' BALLS**

- 97. A comparison of each of the Accused Products as described above is attached to this Complaint as Exhibit 6.
- 98. All of the Accused Products have the same approximate diameter, 1.685 inches, and the same approximate weight, 1.61 ounces.
- 99. All of the Accused Products have covers made of the same material, cast aromatic urethane. They all have the same approximate hardness and thickness.
- 100. All of the Accused Products have inner covers made of the same material, ionomer. They all have the same approximate hardness and thickness.
  - 101. All of the Accused Products are manufactured in Taiwan.
- 102. All of the Accused Products have the same dimple pattern: 318 dimples arranged in a triangular dipyramid pattern as per the picture below.



- 103. The dimple pattern for all the Accused Products includes three different sizes of dimple: 90 dimples with an approximate diameter of 0.16 inches (light blue in the above figure), 192 dimples with an approximate diameter of 0.17 inches (medium blue in the above figure), and 36 dimples with an approximate diameter of 0.18 inches (dark blue in the above figure).
- 104. The dimple pattern for all the Accused Products covers approximately79% of the ball with dimples.

# **COUNT I – INFRINGEMENT OF THE '736 PATENT**

- 105. The allegations of paragraphs 1 through 104 are incorporated by reference into this Count I as though fully set forth herein.
- 106. Acushnet is the owner of all right, title, and interest in and to the '736 Patent.
- 107. The '736 Patent was duly and legally issued by the United States Patent and Trademark Office on August 2, 2005, and is valid and enforceable.
- 108. Defendants, without authority, are using, offering to sell, selling and/or importing into the United States the Accused Products.
- 109. The Accused Products incorporate or make use of the inventions covered by the '736 Patent, thereby infringing, literally and/or under the doctrine of equivalents, one or more claims of the '736 Patent. The Accused Products incorporate the technology embodied in the '736 Patent.
- 110. Defendants have directly infringed and continue to directly infringe the '736 Patent, literally and/or under the doctrine of equivalents, and will continue to do so unless enjoined by this Court.

- 111. As a direct result of Defendants' infringement, Acushnet has suffered, and will continue to suffer, damages, irreparable harm and impairment of the value of its patent rights.
- 112. Acushnet has been, is being, and will continue to be, seriously damaged and irreparably harmed unless Defendants are enjoined by this Court from the actions complained of herein, and thus Acushnet is without an adequate remedy at law.
- 113. Acushnet is entitled to recover from Defendants the damages sustained by Acushnet as a result of Defendants' wrongful acts in an amount subject to proof at trial.

### **COUNT II – INFRINGEMENT OF THE '369 PATENT**

- 114. The allegations of paragraphs 1 through 113 are incorporated by reference into this Count II as though fully set forth herein.
- 115. Acushnet is the owner of all right, title, and interest in and to the '369 Patent.
- 116. The '369 Patent was duly and legally issued by the United States Patent and Trademark Office on June 5, 2007, and is valid and enforceable.
- 117. Defendants, without authority, are using, offering to sell, selling and/or importing into the United States the Accused Products.
- 118. The Accused Products incorporate or make use of the inventions covered by the '369 Patent, thereby infringing, literally and/or under the doctrine of equivalents, one or more claims of the '369 Patent. The Accused Products incorporate the technology embodied in the '369 Patent.

- 119. Defendants have directly infringed and continue to directly infringe the '369 Patent, literally and/or under the doctrine of equivalents, and will continue to do so unless enjoined by this Court.
- 120. As a direct result of Defendants' infringement, Acushnet has suffered, and will continue to suffer damages, irreparable harm and impairment of the value of its patent rights.
- 121. Acushnet has been, is being, and will continue to be, seriously damaged and irreparably harmed unless Defendants are enjoined by this Court from the actions complained of herein, and thus Acushnet is without an adequate remedy at law.
- 122. Acushnet is entitled to recover from Defendants the damages sustained by Acushnet as a result of Defendants' wrongful acts in an amount subject to proof at trial.

### **COUNT III – INFRINGEMENT OF THE '137 PATENT**

- 123. The allegations of paragraphs 1 through 122 are incorporated by reference into this Count III as though fully set forth herein.
- 124. Acushnet is the owner of all right, title, and interest in and to the '137 Patent.
- 125. The '137 Patent was duly and legally issued by the United States Patent and Trademark Office on February 17, 2009, and is valid and enforceable.
- 126. Defendants, without authority, are using, offering to sell, selling and/or importing into the United States the Accused Products.
- 127. The Accused Products incorporate or make use of the inventions covered by the '137 Patent, thereby infringing, literally and/or under the doctrine of equivalents,

one or more claims of the '137 Patent. The Accused Products incorporate the technology embodied in the '137 Patent.

- 128. Defendants have directly infringed and continue to directly infringe the '137 Patent, literally and/or under the doctrine of equivalents, and will continue to do so unless enjoined by this Court.
- 129. As a direct result of Defendants' infringement, Acushnet has suffered, and will continue to suffer damages, irreparable harm and impairment of the value of its patent rights.
- 130. Acushnet has been, is being, and will continue to be, seriously damaged and irreparably harmed unless Defendants are enjoined by this Court from the actions complained of herein, and thus Acushnet is without an adequate remedy at law.
- 131. Acushnet is entitled to recover from Defendants the damages sustained by Acushnet as a result of Defendants' wrongful acts in an amount subject to proof at trial.

### **COUNT IV – INFRINGEMENT OF THE '902 PATENT**

- 132. The allegations of paragraphs 1 through 131 are incorporated by reference into this Count IV as though fully set forth herein.
- 133. Acushnet is the owner of all right, title, and interest in and to the '902 Patent.
- 134. The '902 Patent was duly and legally issued by the United States Patent and Trademark Office on January 29, 2013, and is valid and enforceable.
- 135. Ariva, without authority, is using, offering to sell, selling and/or importing into the United States the Accused Product.

- 136. The Accused Product incorporates or makes use of the inventions covered by the '902 Patent, thereby infringing, literally and/or under the doctrine of equivalents, one or more claims of the '902 Patent. The Accused Product incorporates the technology embodied in the '902 Patent.
- 137. Ariva has directly infringed and continues to directly infringe the '902 Patent, literally and/or under the doctrine of equivalents, and will continue to do so unless enjoined by this Court.
- 138. As a direct result of Ariva's infringement, Acushnet has suffered, and will continue to suffer, damages, irreparable harm and impairment of the value of its patent rights.
- 139. Acushnet has been, is being, and will continue to be, seriously damaged and irreparably harmed unless Ariva is enjoined by this Court from the actions complained of herein, and thus Acushnet is without an adequate remedy at law.
- 140. Acushnet is entitled to recover from Ariva the damages sustained by Acushnet as a result of Ariva's wrongful acts in an amount subject to proof at trial.

### **COUNT V – INFRINGEMENT OF THE '381 PATENT**

- 141. The allegations of paragraphs 1 through 140 are incorporated by reference into this Count V as though fully set forth herein.
- 142. Acushnet is the owner of all right, title, and interest in and to the '381 Patent.
- 143. The '381 Patent was duly and legally issued by the United States Patent and Trademark Office on June 18, 2013, and is valid and enforceable.

- 144. Ariva, without authority, is using, offering to sell, selling and/or importing into the United States the Accused Product.
- 145. The Accused Product incorporates or makes use of the inventions covered by the '381 Patent, thereby infringing, literally and/or under the doctrine of equivalents, one or more claims of the '381 Patent. The Accused Product incorporates the technology embodied in the '381 Patent.
- 146. Ariva has directly infringed and continues to directly infringe the '381 Patent, literally and/or under the doctrine of equivalents, and will continue to do so unless enjoined by this Court.
- 147. As a direct result of Ariva's infringement, Acushnet has suffered, and will continue to suffer, damages, irreparable harm and impairment of the value of its patent rights.
- 148. Acushnet has been, is being, and will continue to be, seriously damaged and irreparably harmed unless Ariva is enjoined by this Court from the actions complained of herein, and thus Acushnet is without an adequate remedy at law.
- 149. Acushnet is entitled to recover from Ariva the damages sustained by Acushnet as a result of Ariva's wrongful acts in an amount subject to proof at trial.

# PRAYER FOR RELIEF

**WHEREFORE**, Plaintiff Acushnet prays for a judgment against Defendants as follows:

- (a) Declaring that Defendants have infringed the Patents-In-Suite;
- (b) Ordering that Defendants, including their officers, agents, servants, employees, subsidiaries, attorneys, and all other persons in active concert or participation

with Defendants, be preliminarily and permanently enjoined and restrained from further infringing the Patents-In-Suit;

- (c) Awarding Acushnet all relief available under the patent laws of the United States, including but not limited to monetary damages and including prejudgment interest; and
  - (d) Granting Acushnet such other relief as the Court deems just and proper.

# **DEMAND FOR JURY TRIAL**

Pursuant to Rule 38, Fed. R. Civ. P., Acushnet hereby demands a trial by jury for all issues triable of right by a jury in this case.

Date: April 6, 2015

Respectfully submitted,

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