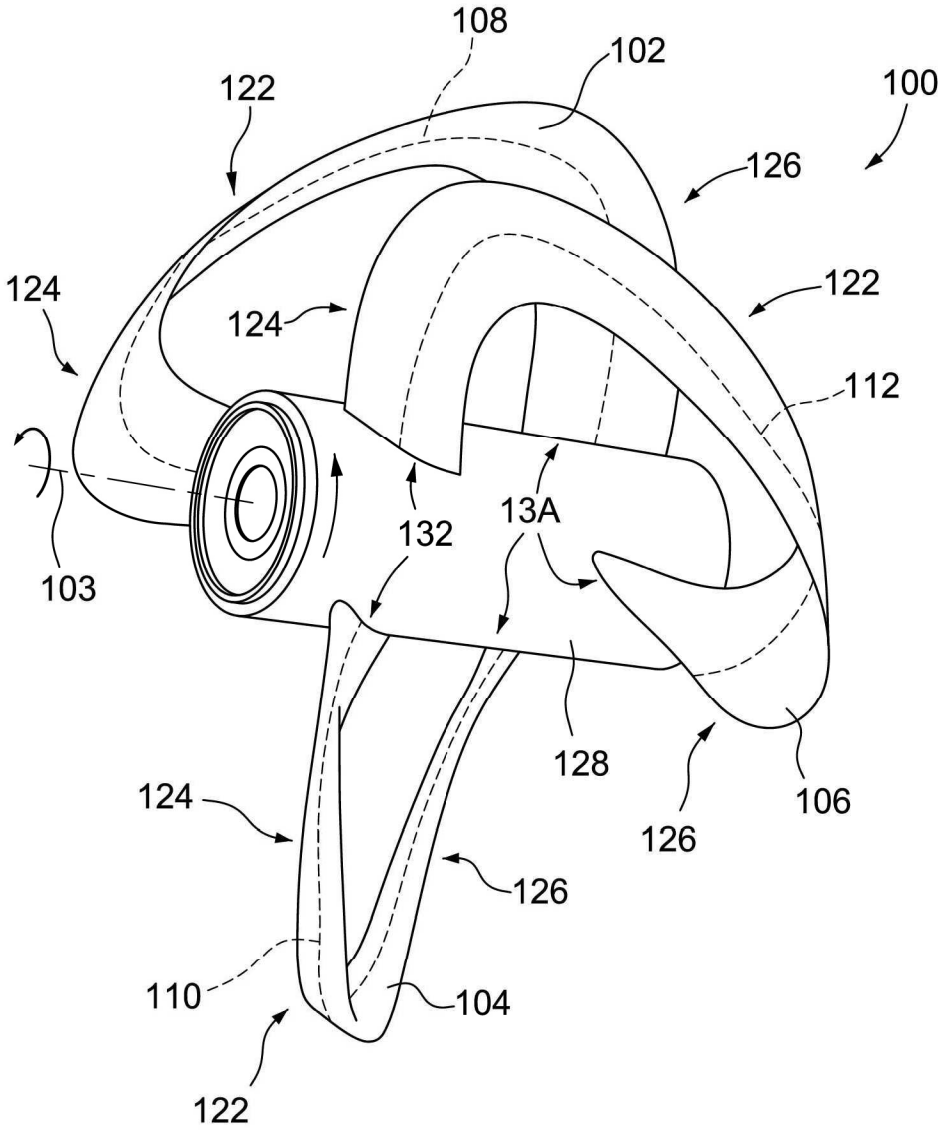

108
102
100
122
126
124
124
122
112
13A
132
103
128
106
126
124
126
110
104
122

FIG. 1A

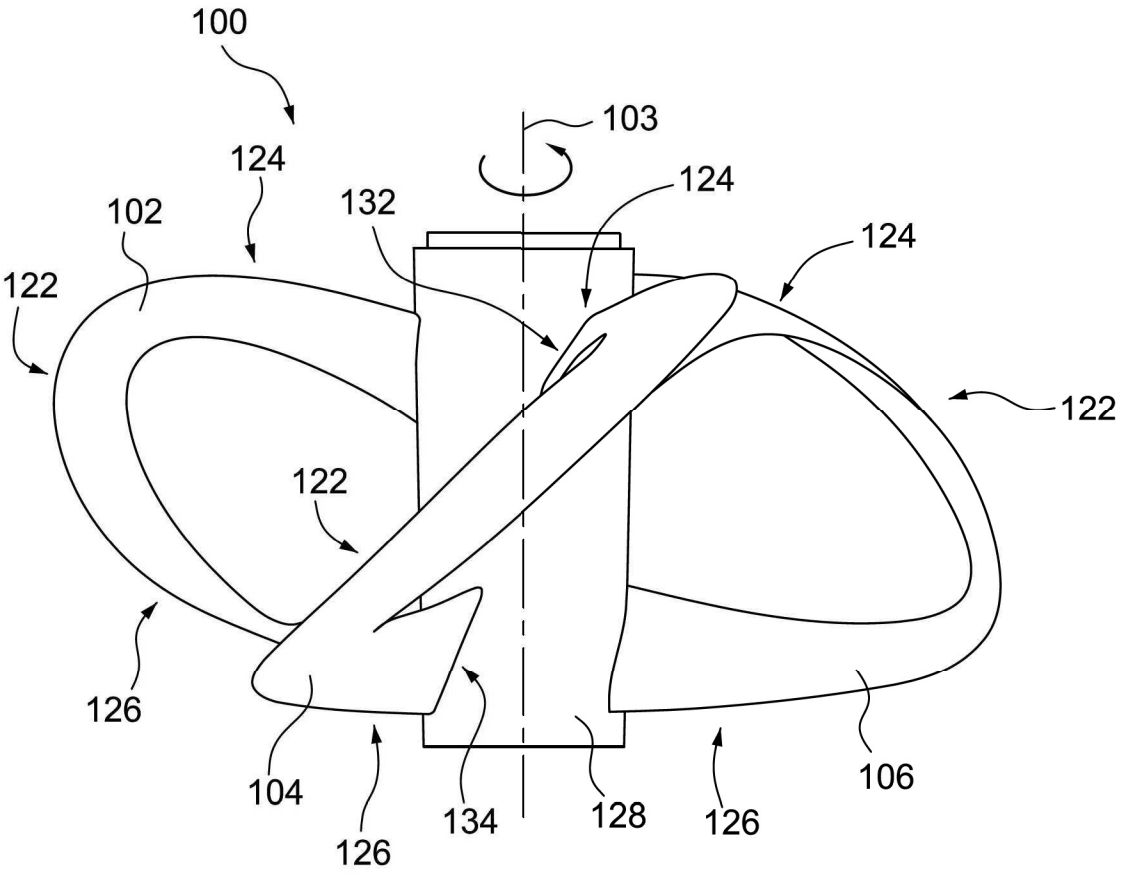

100
103
124
124
102
132
124
122
122
122
126
104
126
134
128
126
106

FIG. 1B

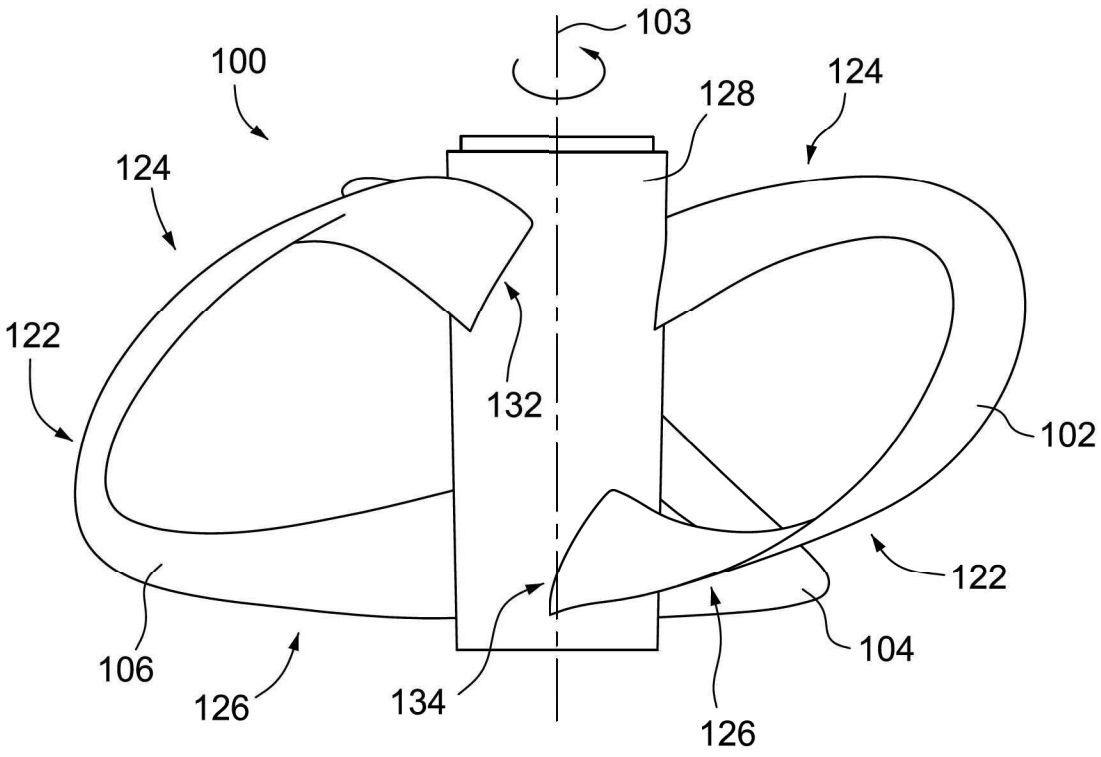


FIG. 1C

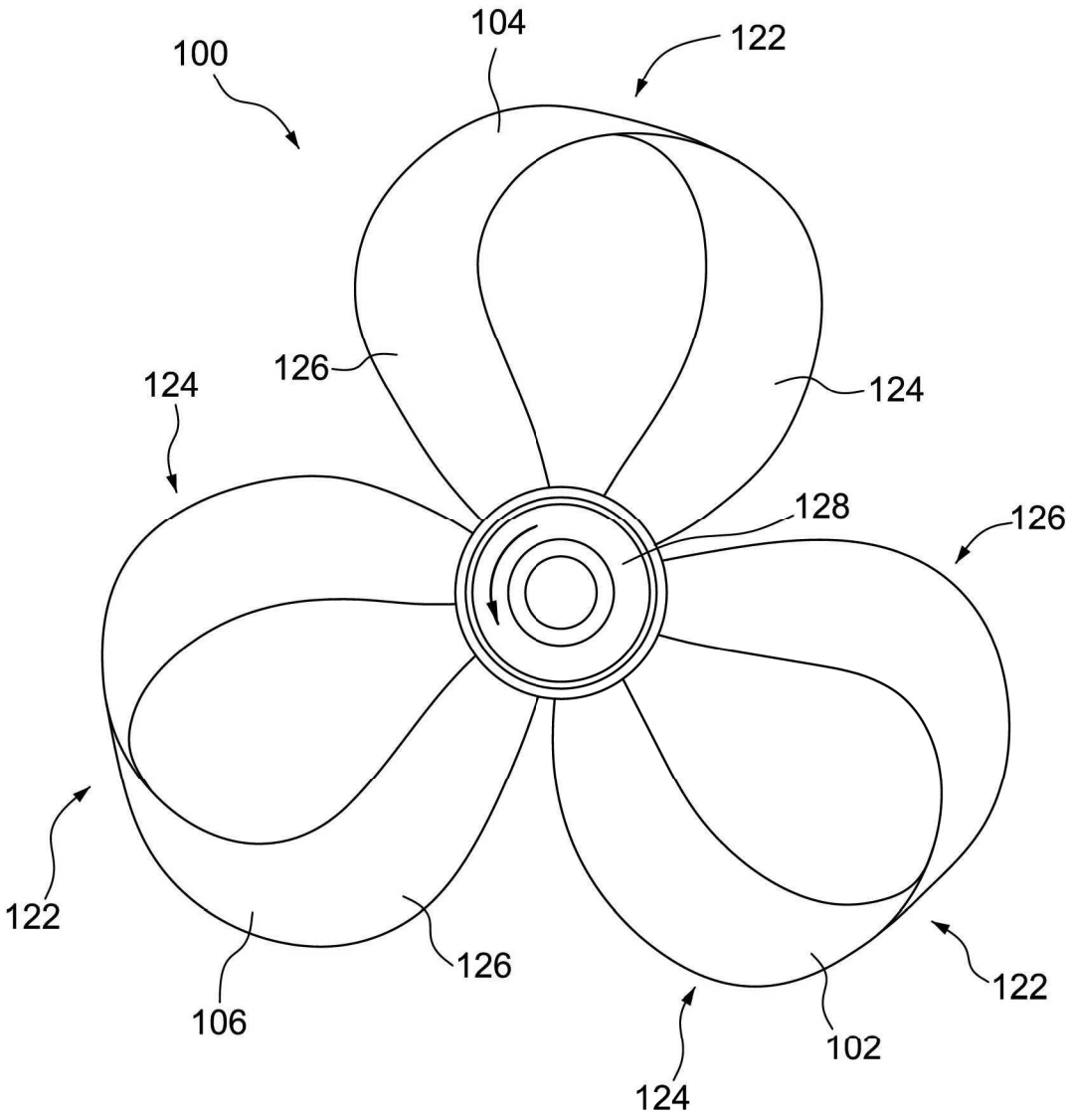


FIG. 1D

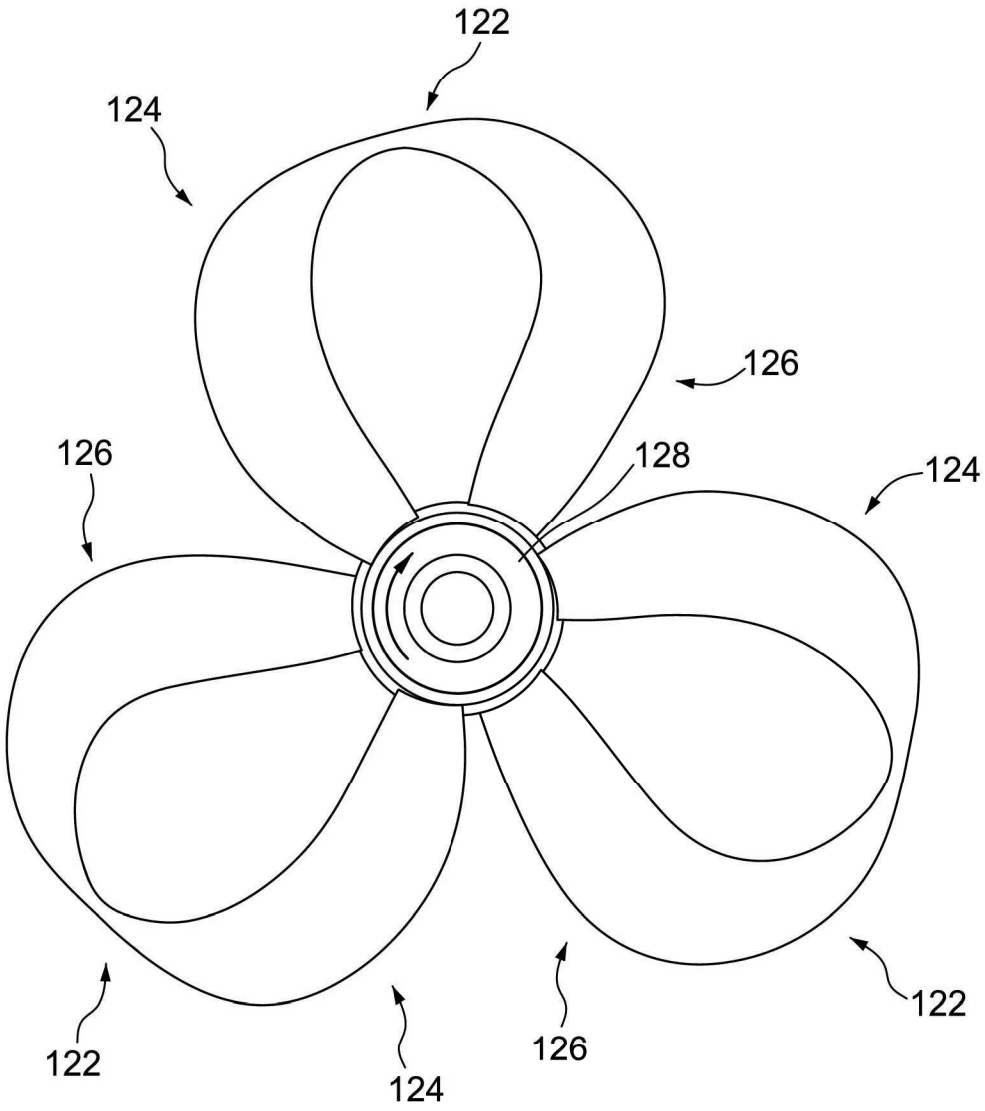


FIG. 1E

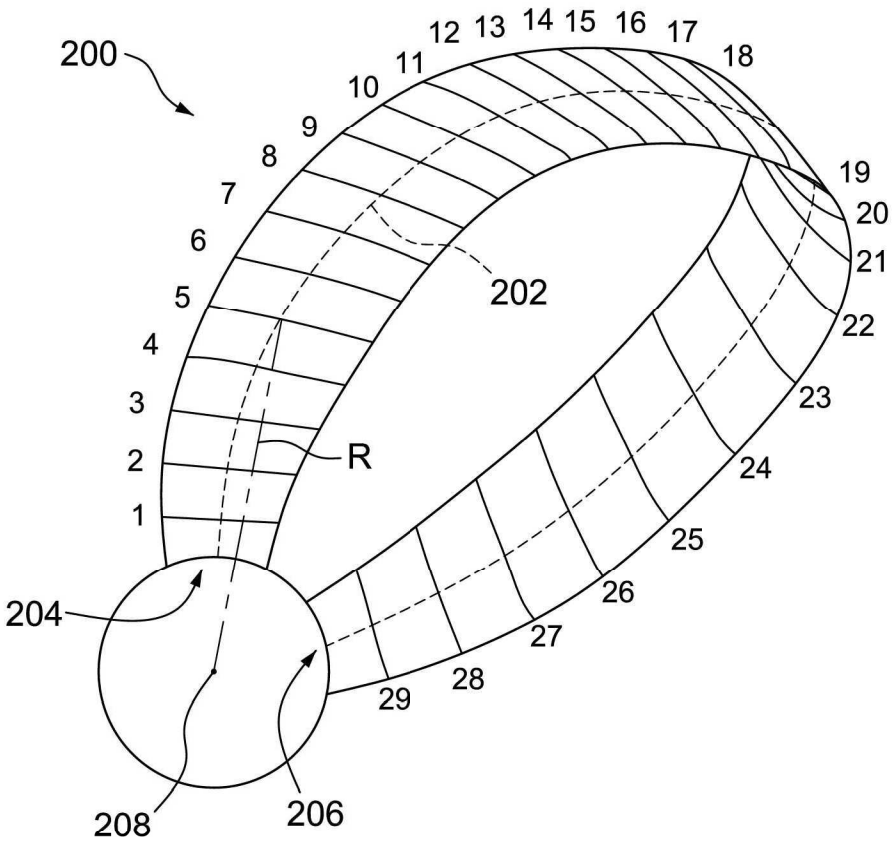

200
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
202
R
204
206
208

FIG. 2

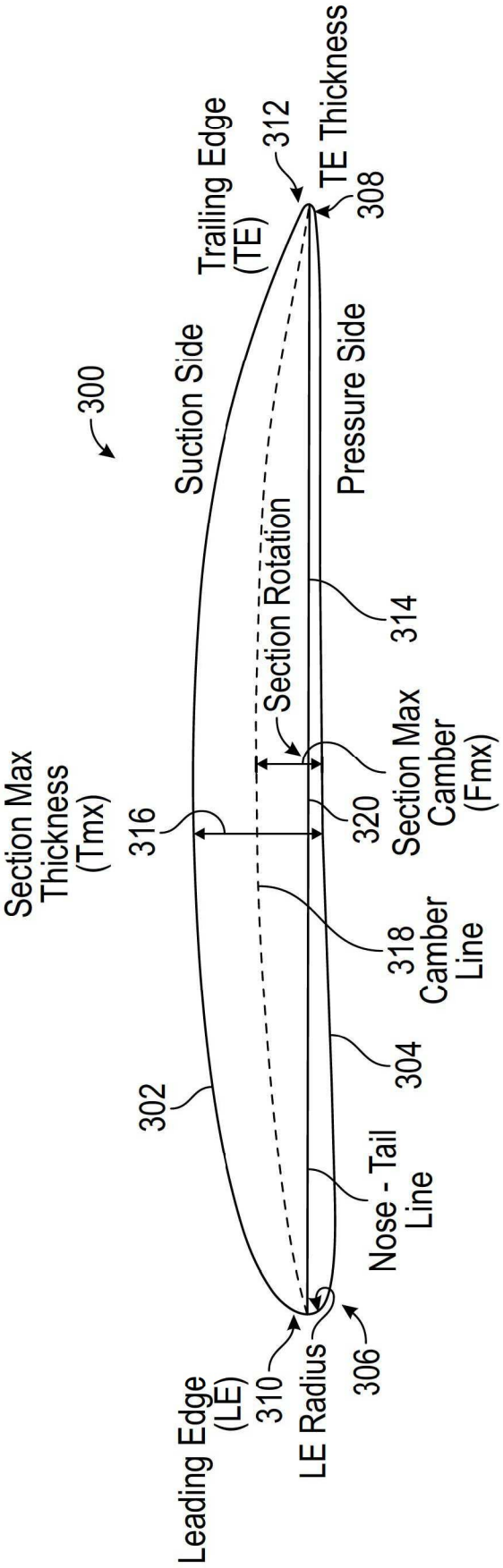

300
Suction Side
Trailing Edge (TE)
312
TE Thickness
308
Pressure Side
Section Rotation
314
Section Max Thickness (Tmx)
316
320
Section Max Camber (Fmx)
318
Camber Line
304
302
Nose - Tail Line
Leading Edge (LE)
310
LE Radius
306

FIG. 3

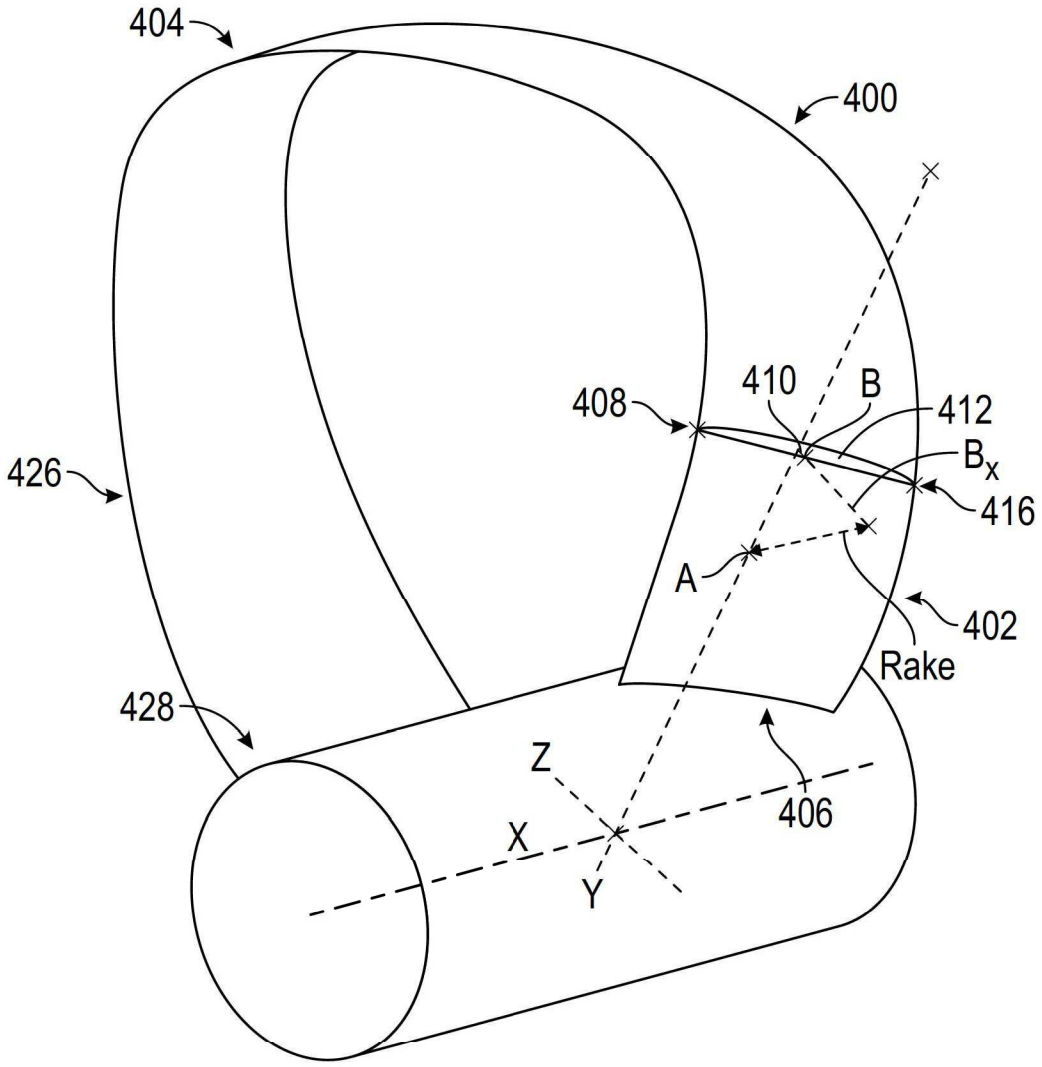


FIG. 4A

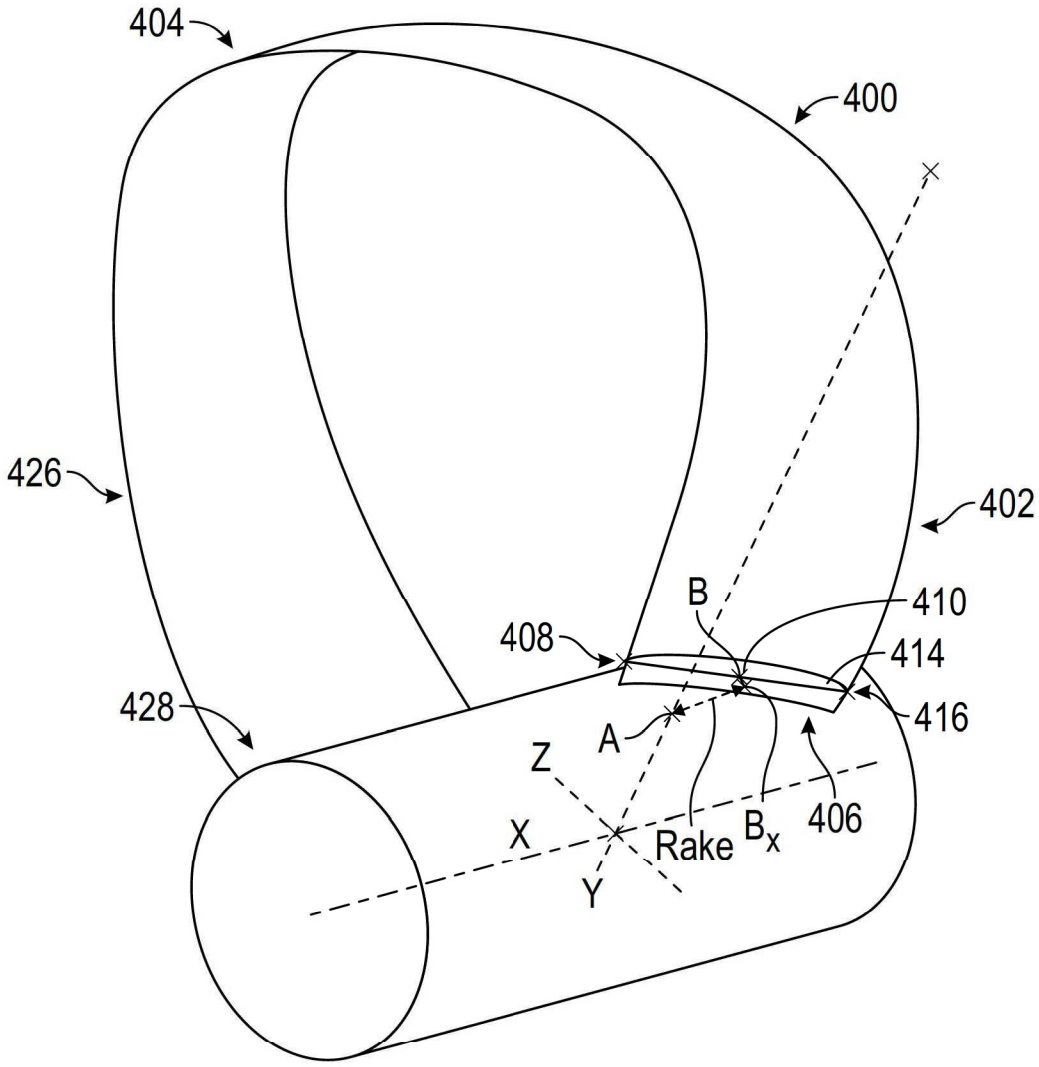


FIG. 4B

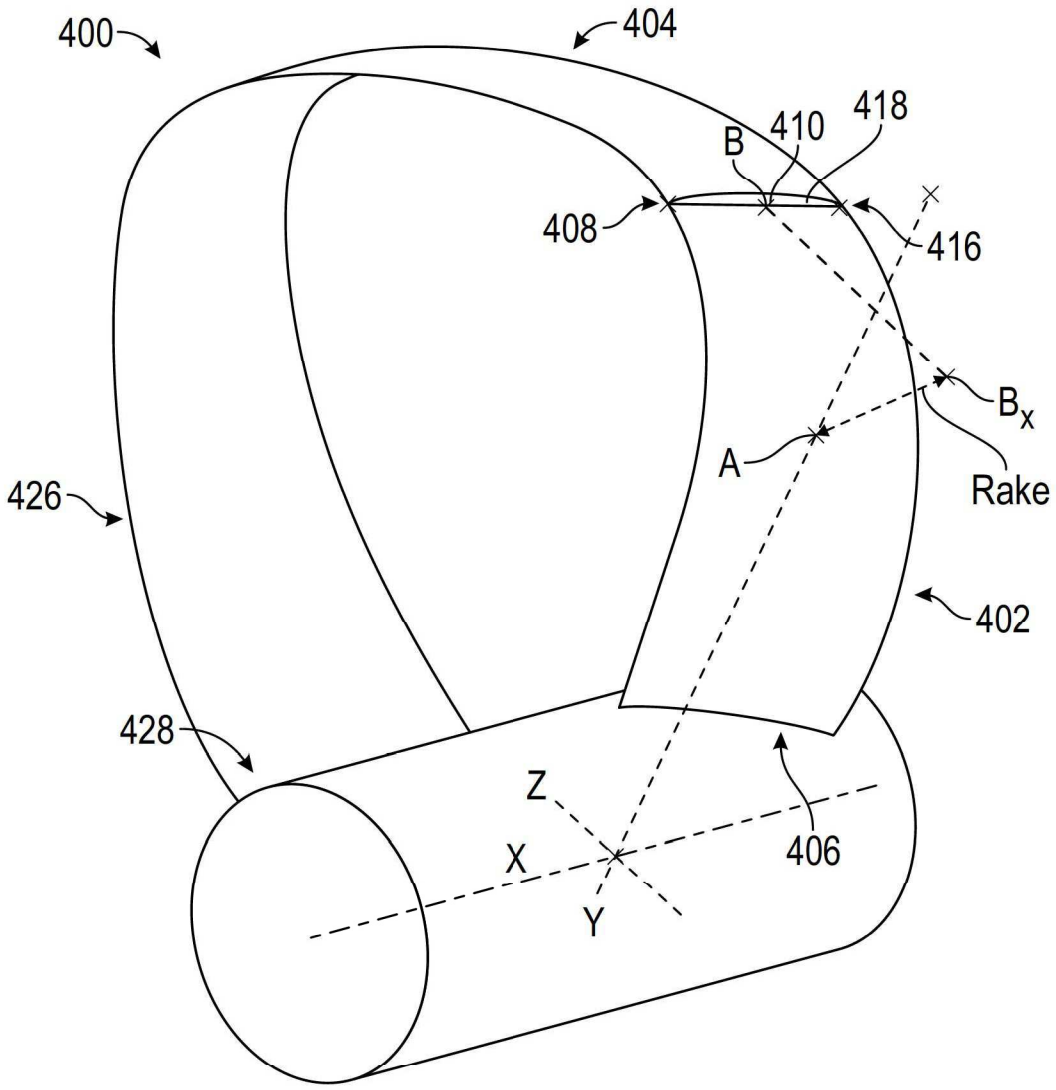


FIG. 4C

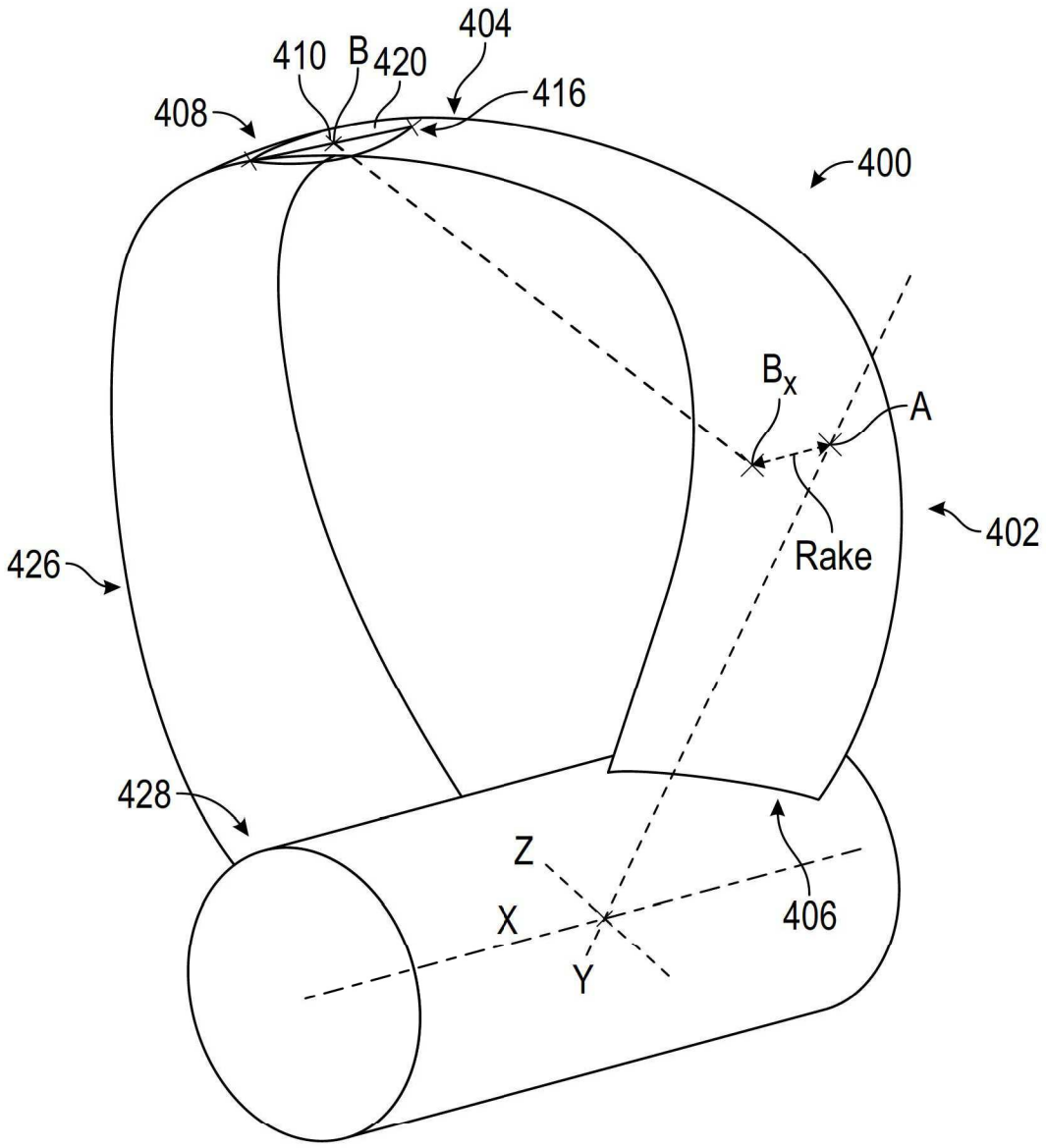


FIG. 4D

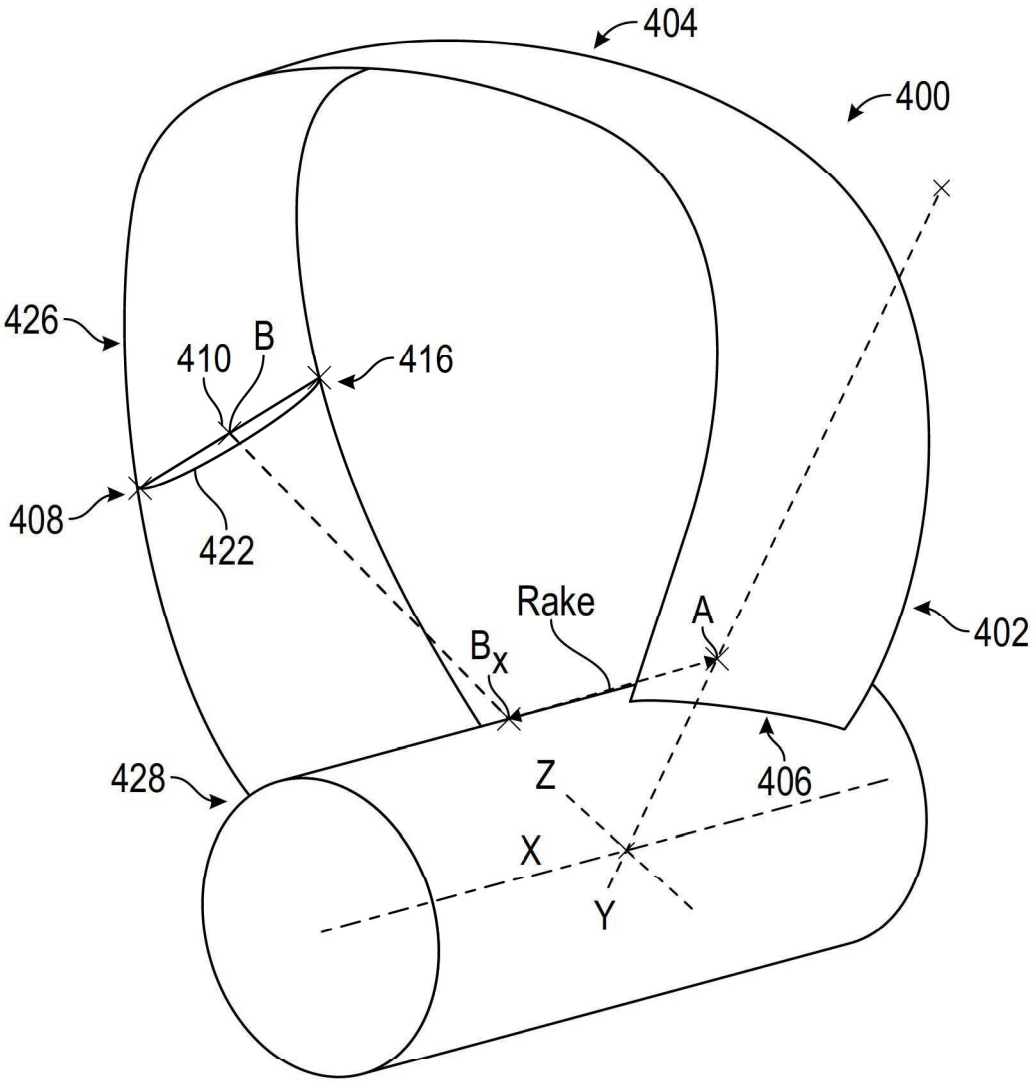


FIG. 4E

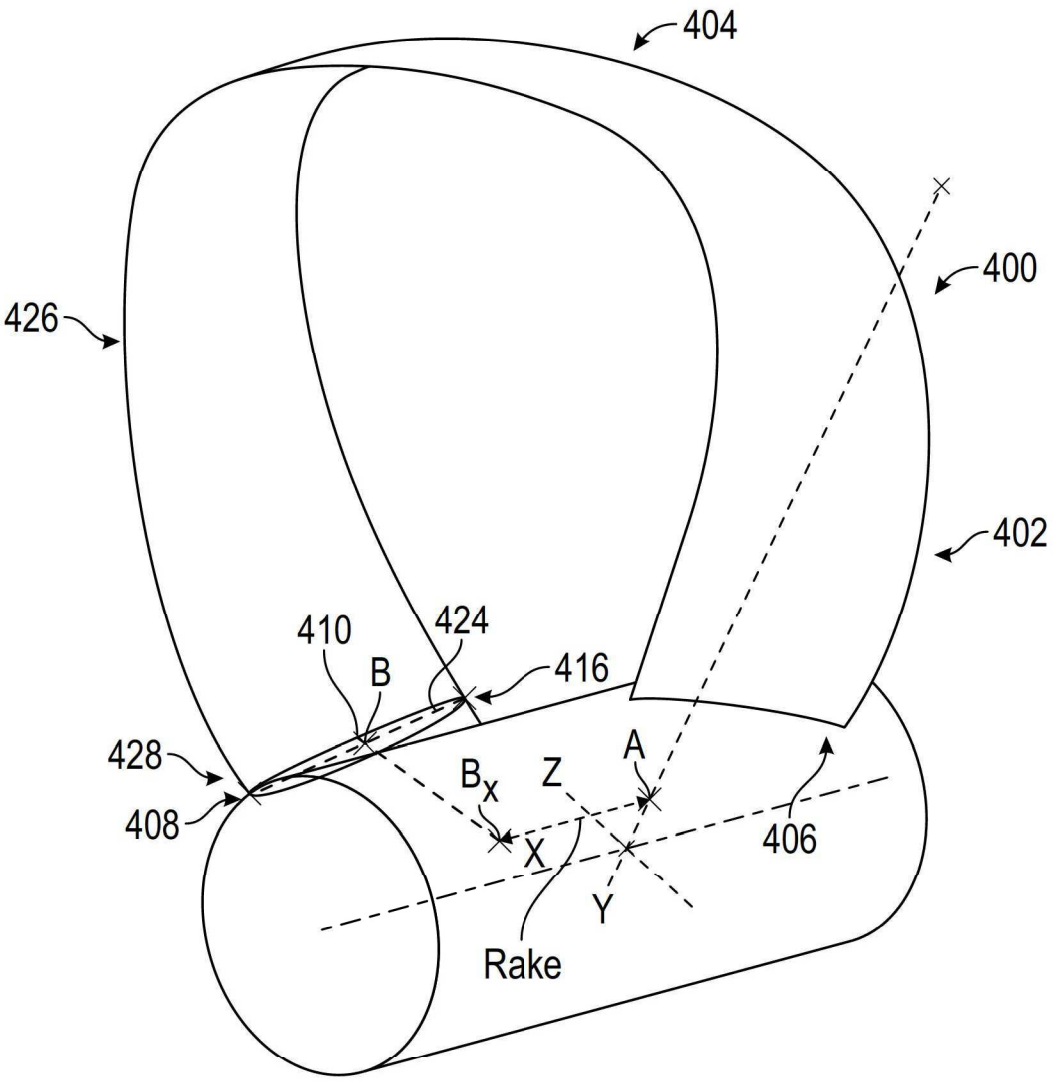


FIG. 4F

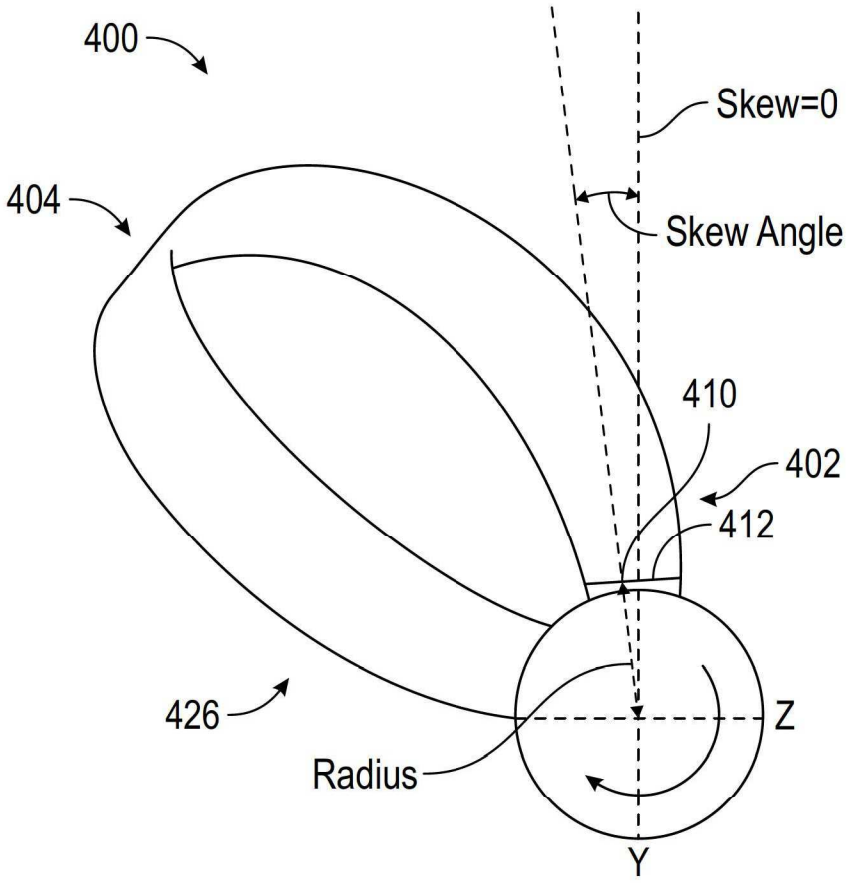


FIG. 5A

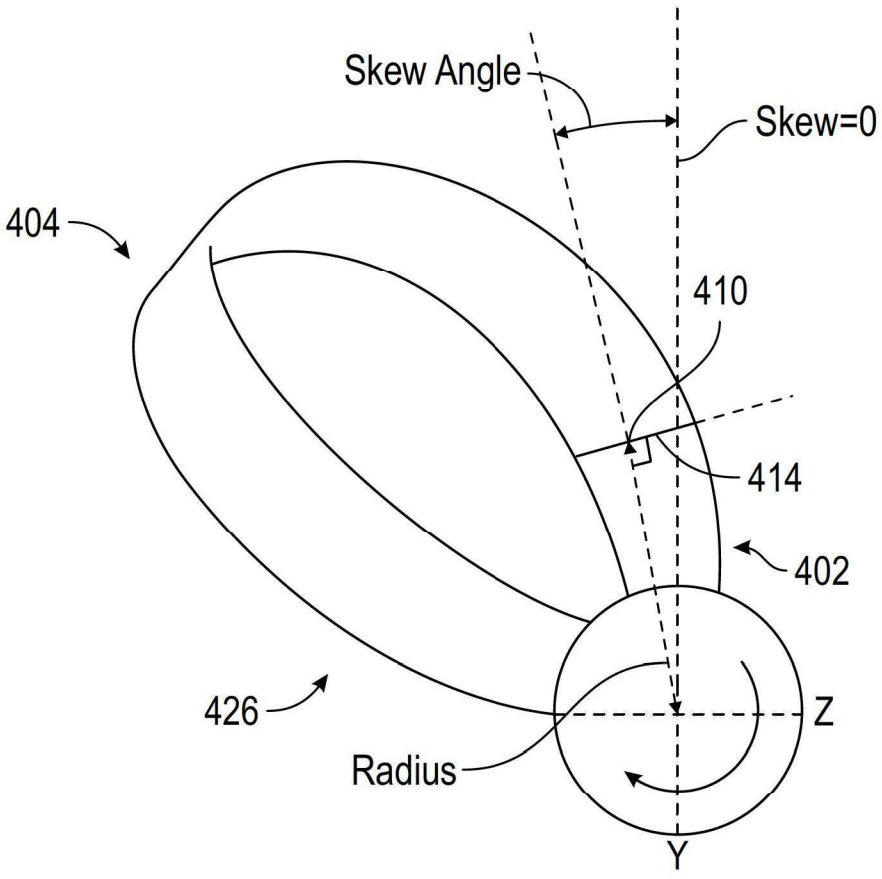


FIG. 5B

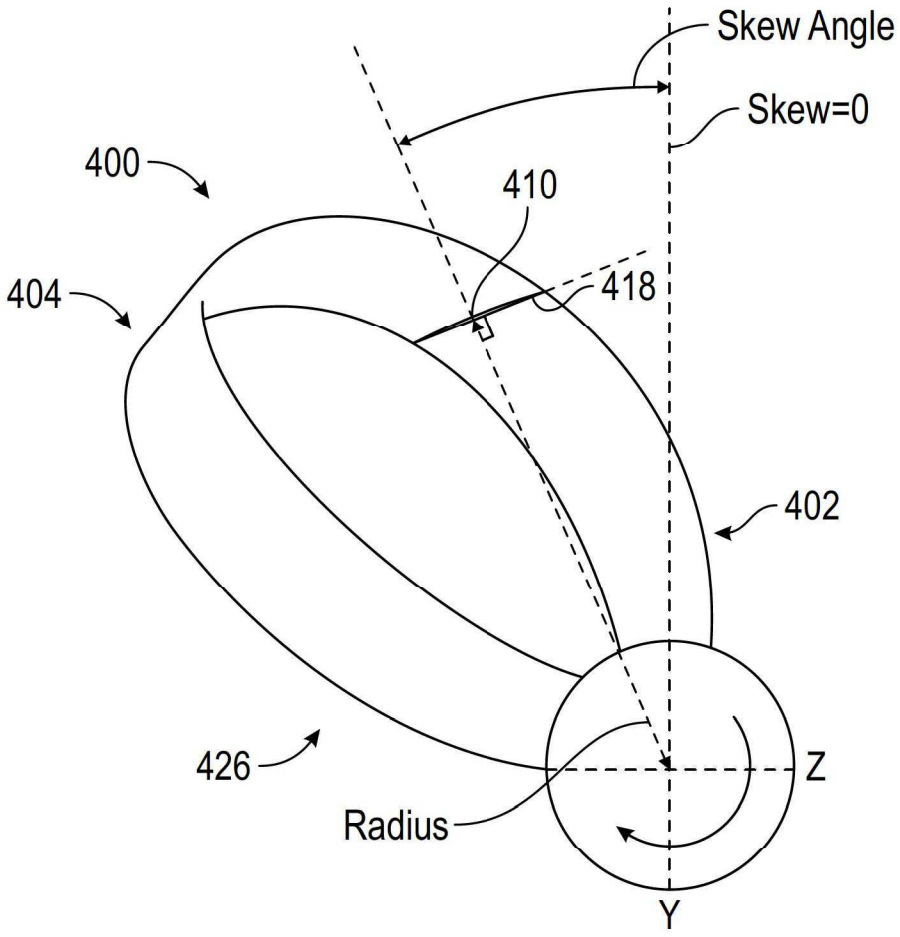


FIG. 5C

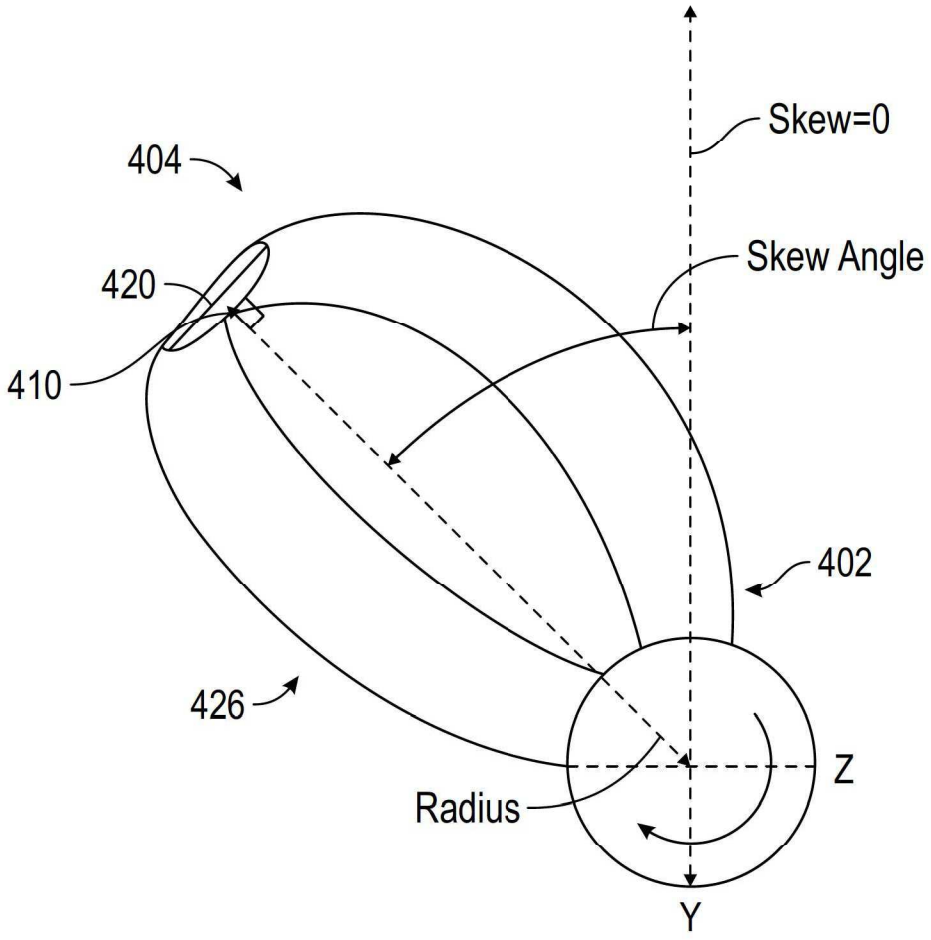


FIG. 5D

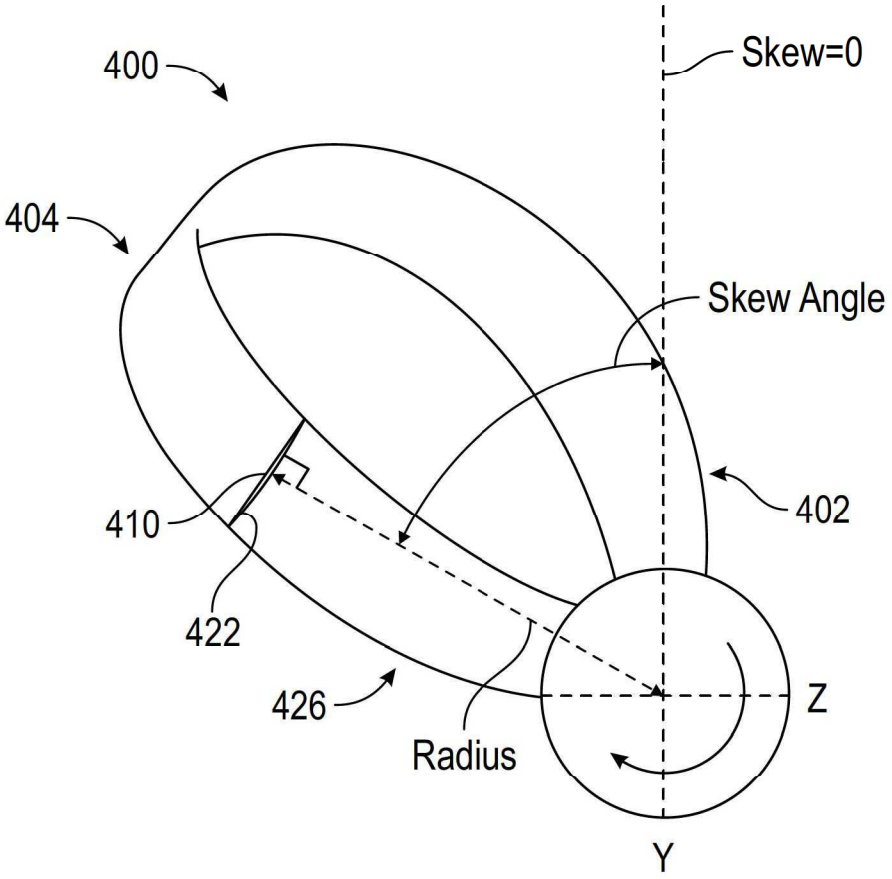


FIG. 5E

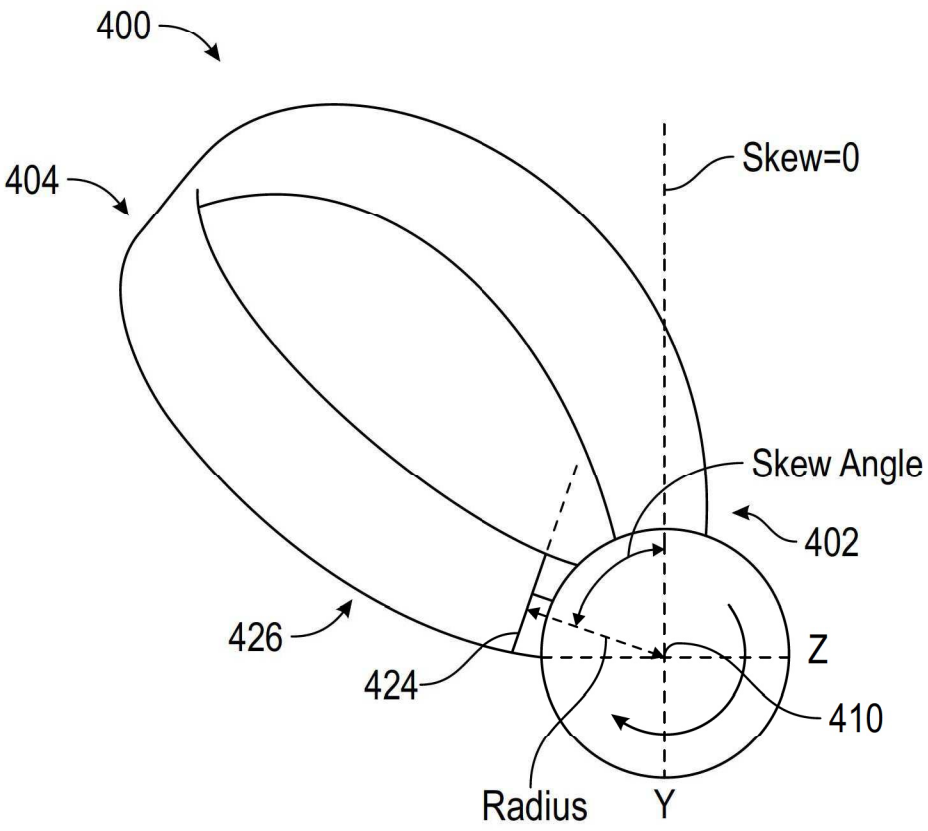


FIG. 5F

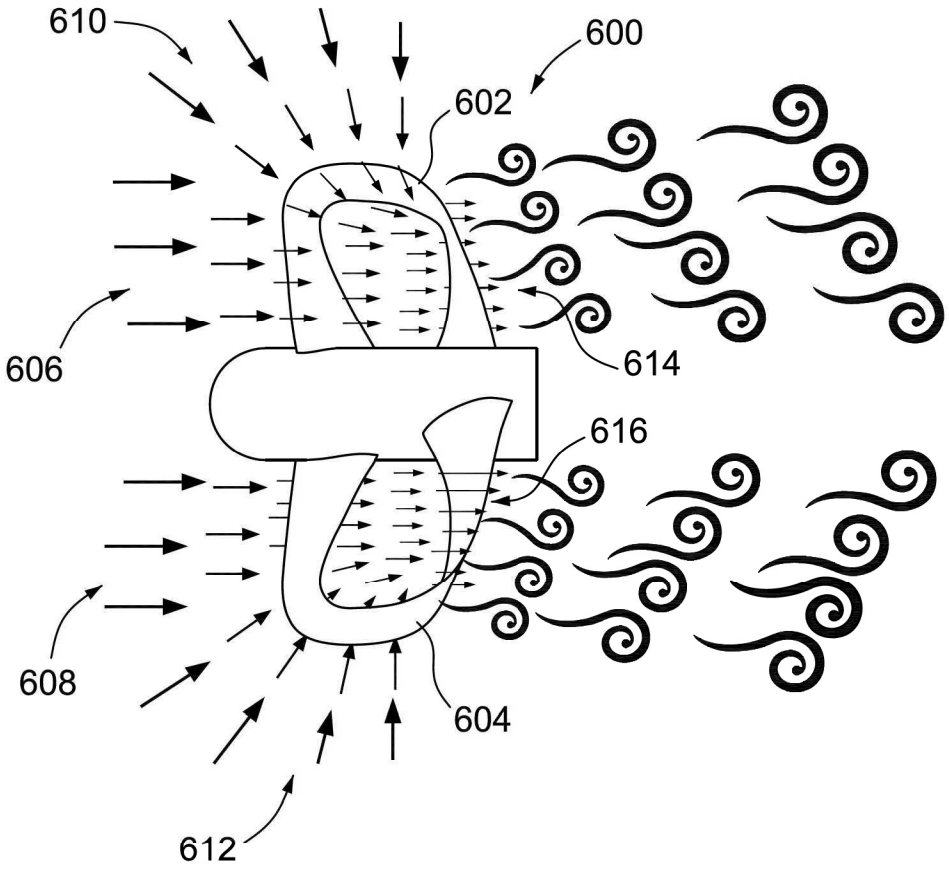


FIG. 6

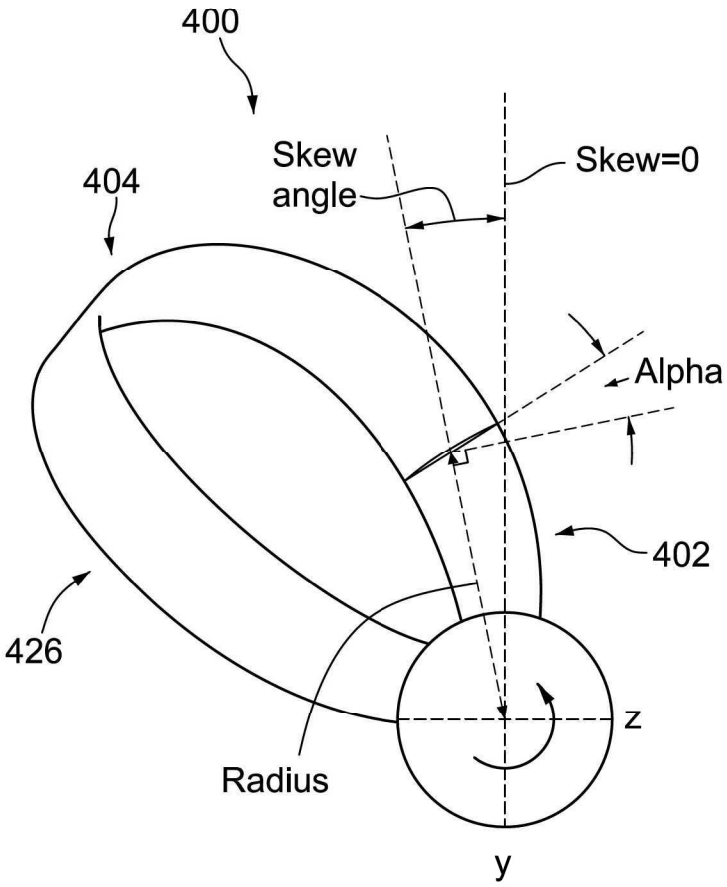


FIG. 7A

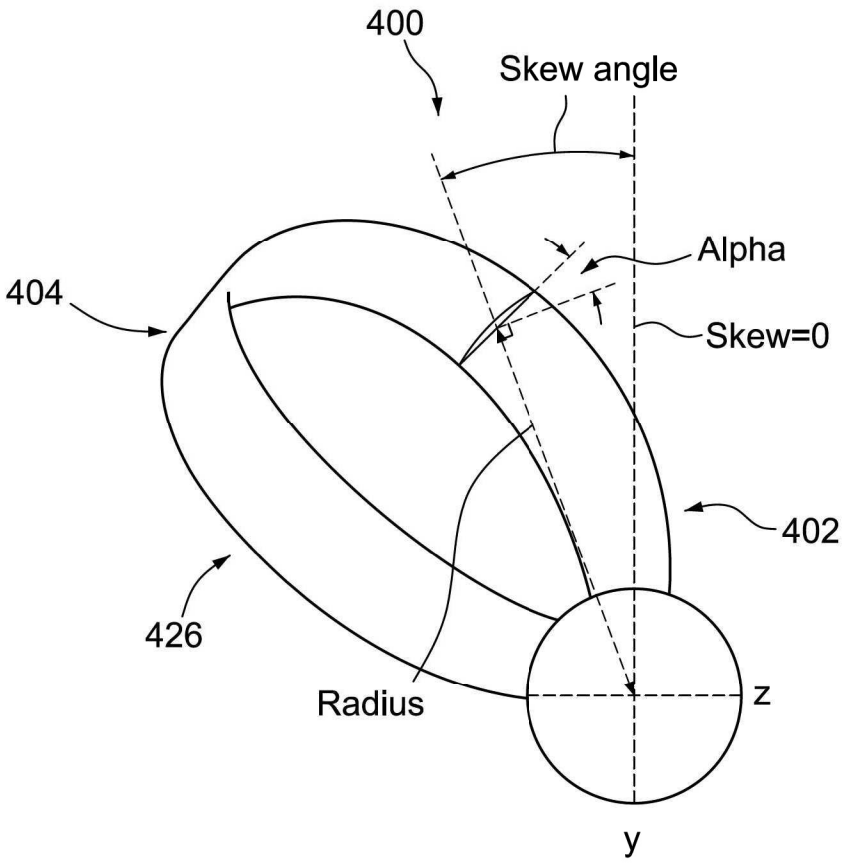


FIG. 7B

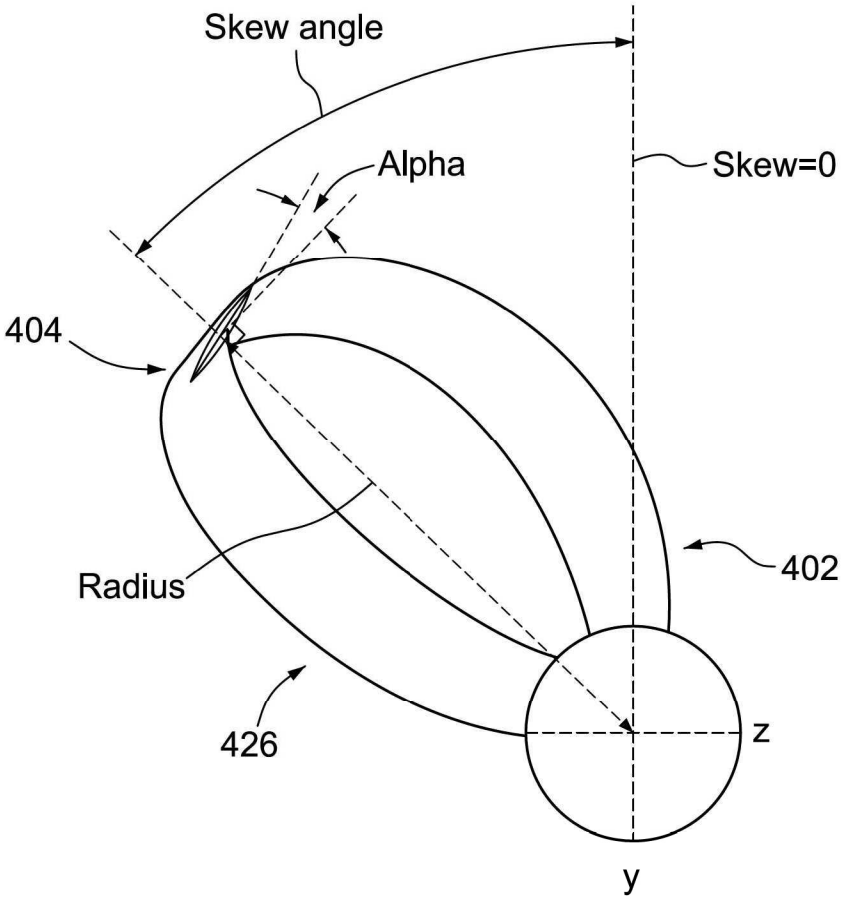


FIG. 7C

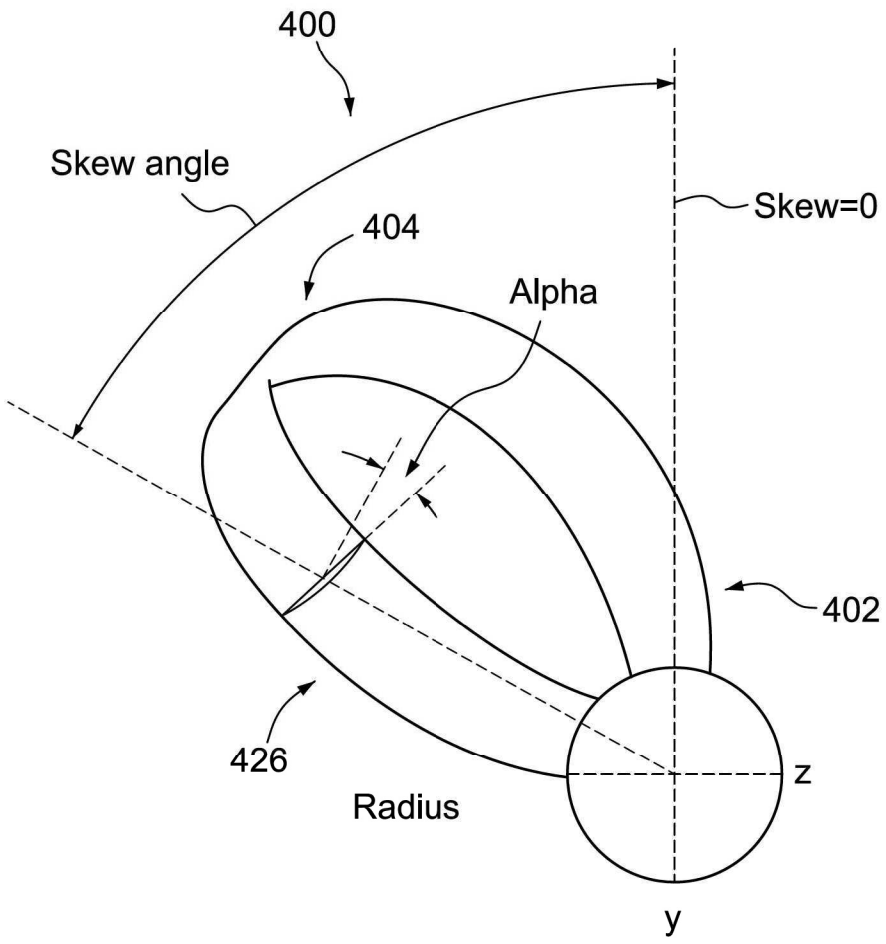


FIG. 7D

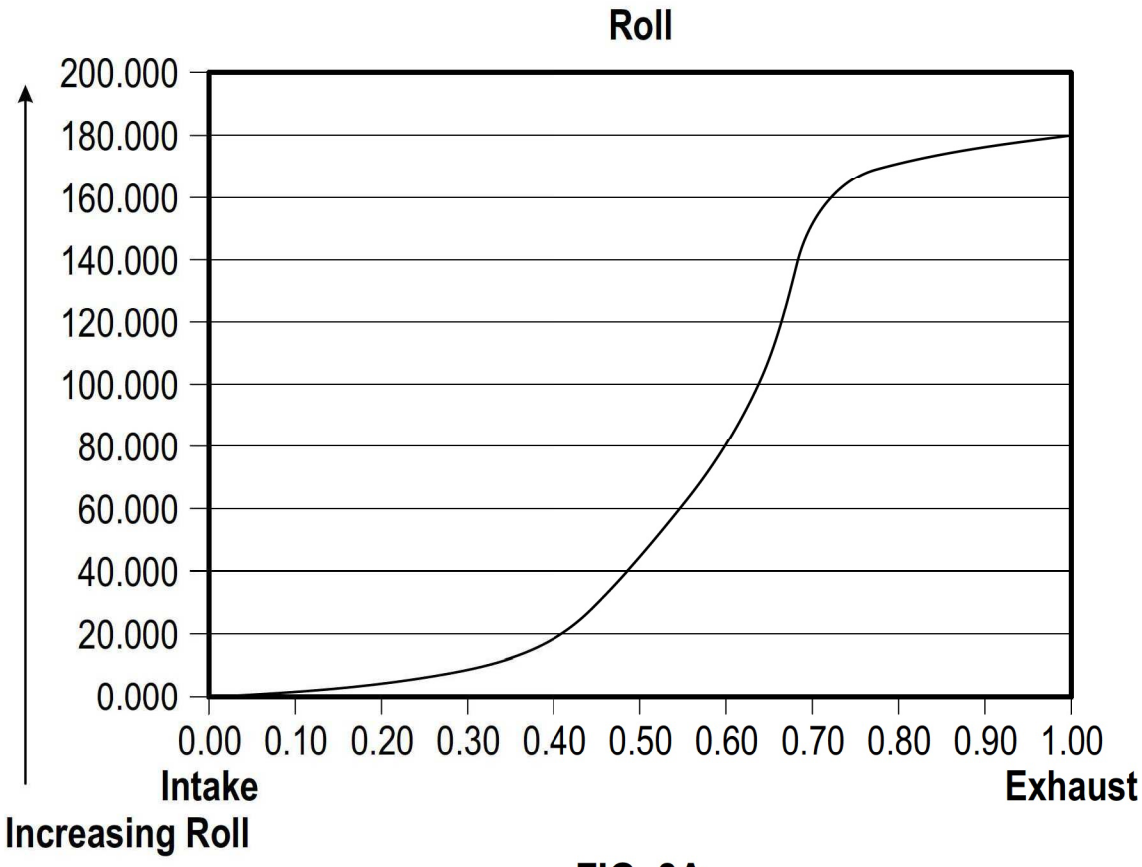

Roll
200.000
180.000
160.000
140.000
120.000
100.000
80.000
60.000
40.000
20.000
0.000
0.00 0.10 0.20 0.30 0.40 0.50 0.60 0.70 0.80 0.90 1.00
Intake
Exhaust
Increasing Roll

FIG. 8A

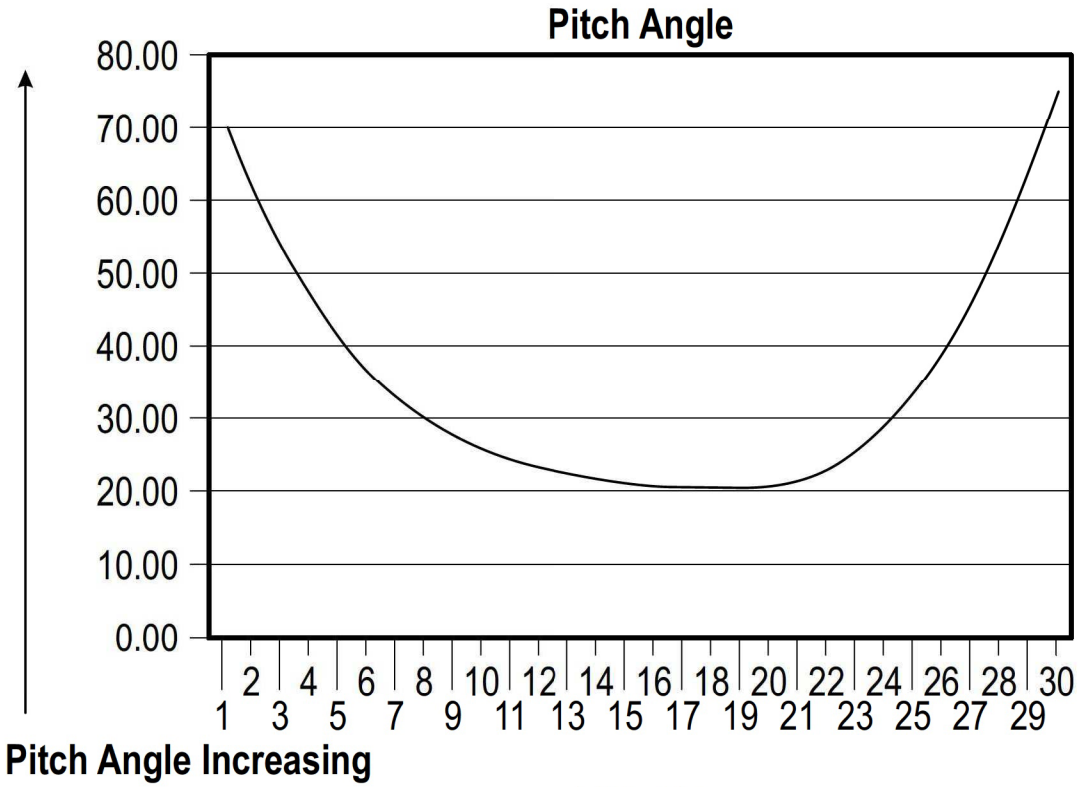

Pitch Angle
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Pitch Angle Increasing

FIG. 8B

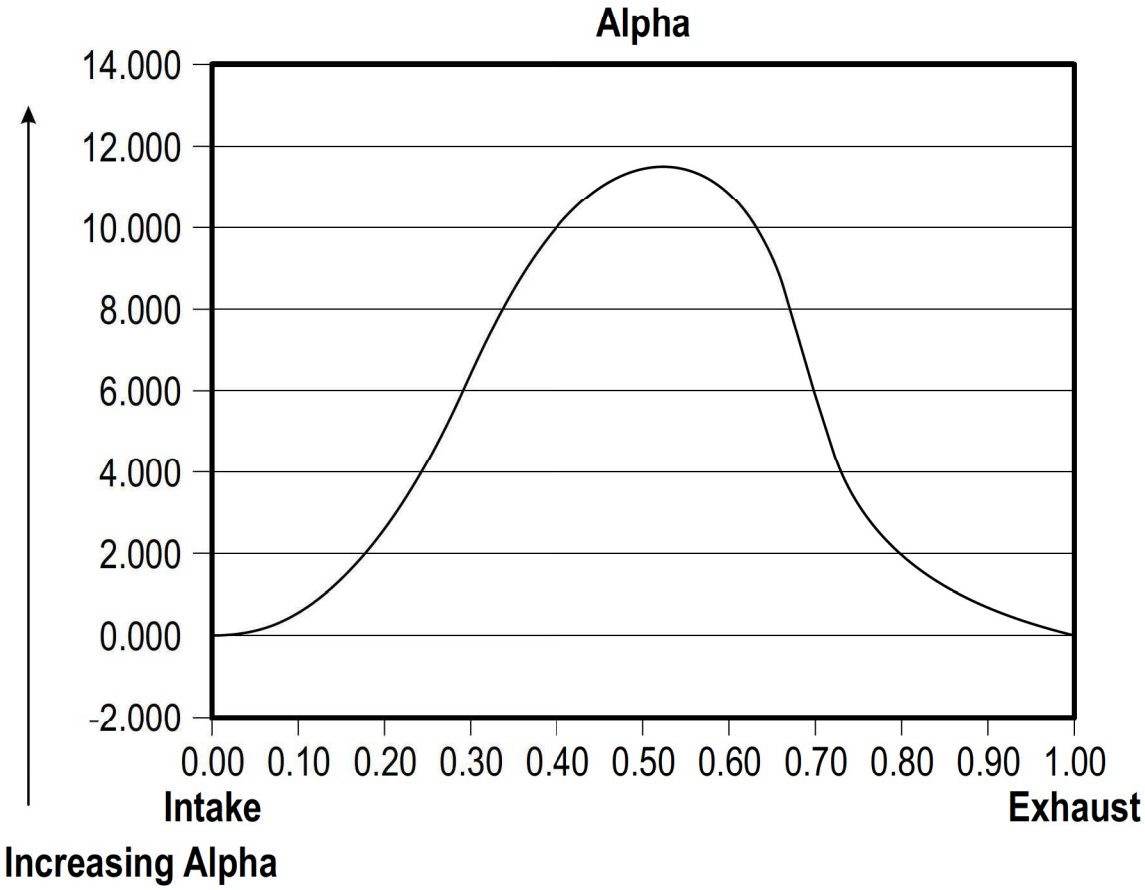

Alpha
14.000
12.000
10.000
8.000
6.000
4.000
2.000
0.000
-2.000
0.00 0.10 0.20 0.30 0.40 0.50 0.60 0.70 0.80 0.90 1.00
Intake
Exhaust
Increasing Alpha

FIG. 8C

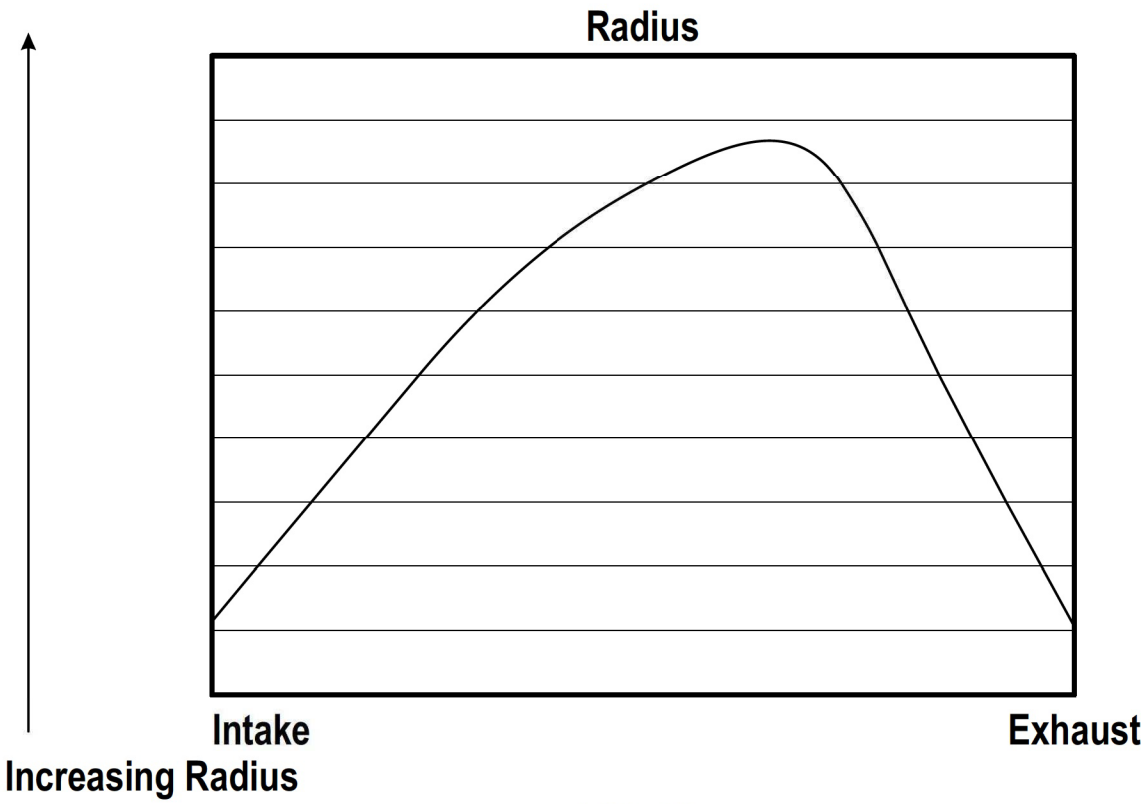


FIG. 8D

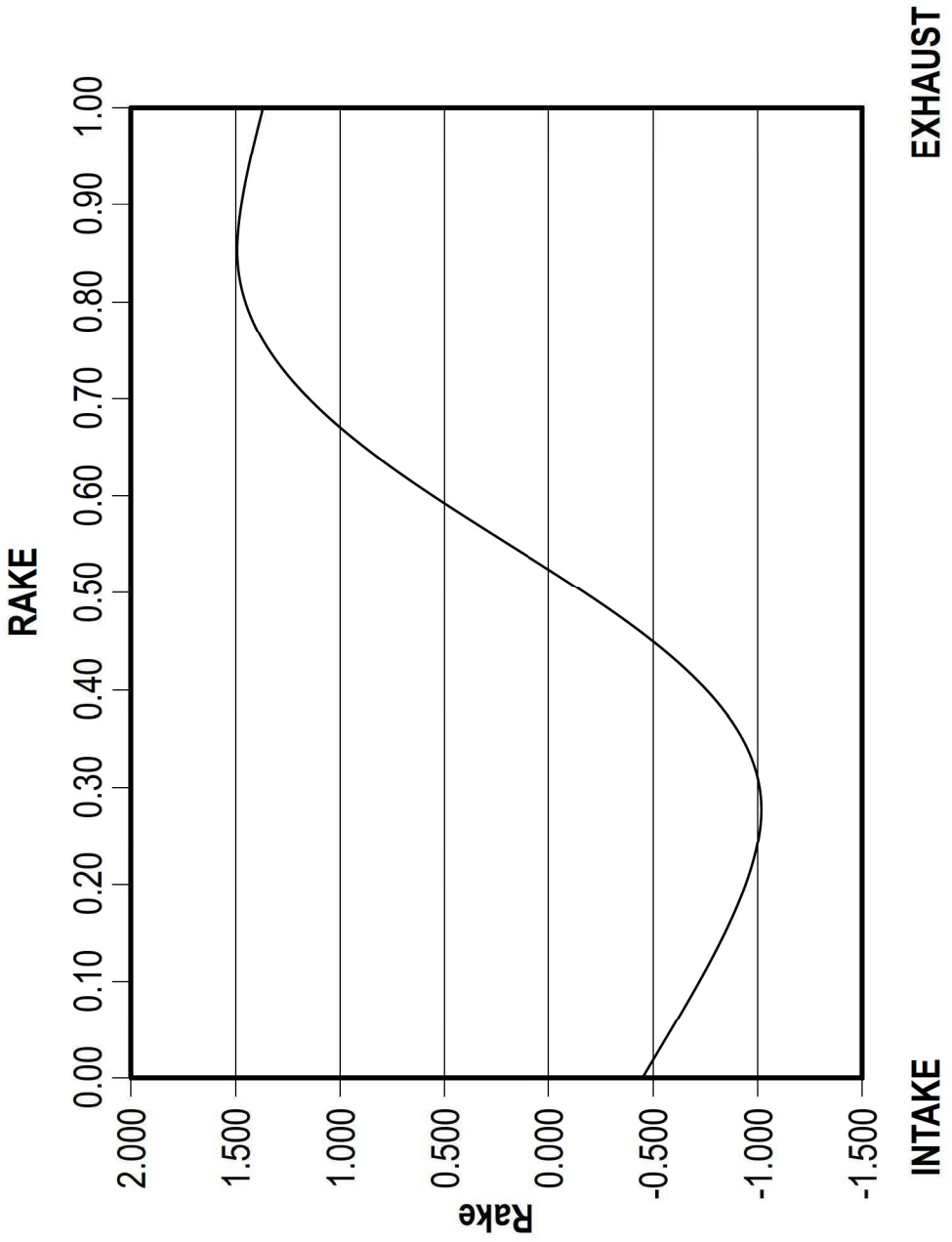

RAKE
0.00
0.10
0.20
0.30
0.40
0.50
0.60
0.70
0.80
0.90
1.00
2.000
1.500
1.000
0.500
0.000
-0.500
-1.000
-1.500
Rake
EXHAUST
INTAKE

FIG. 8E

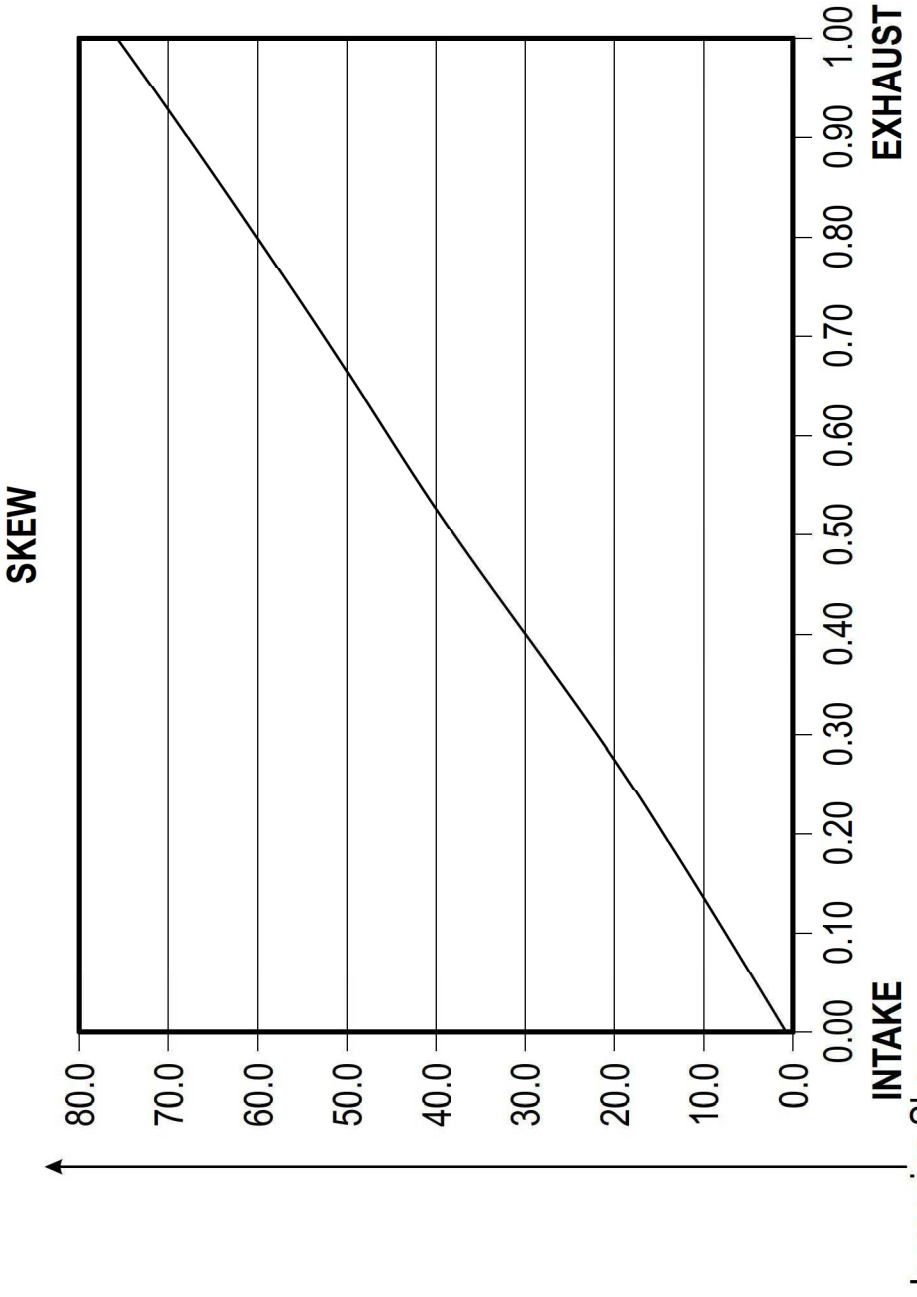

SKEW
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
0.00
0.10
0.20
0.30
0.40
0.50
0.60
0.70
0.80
0.90
1.00
INTAKE
EXHAUST
Increasing Skew

FIG. 8F

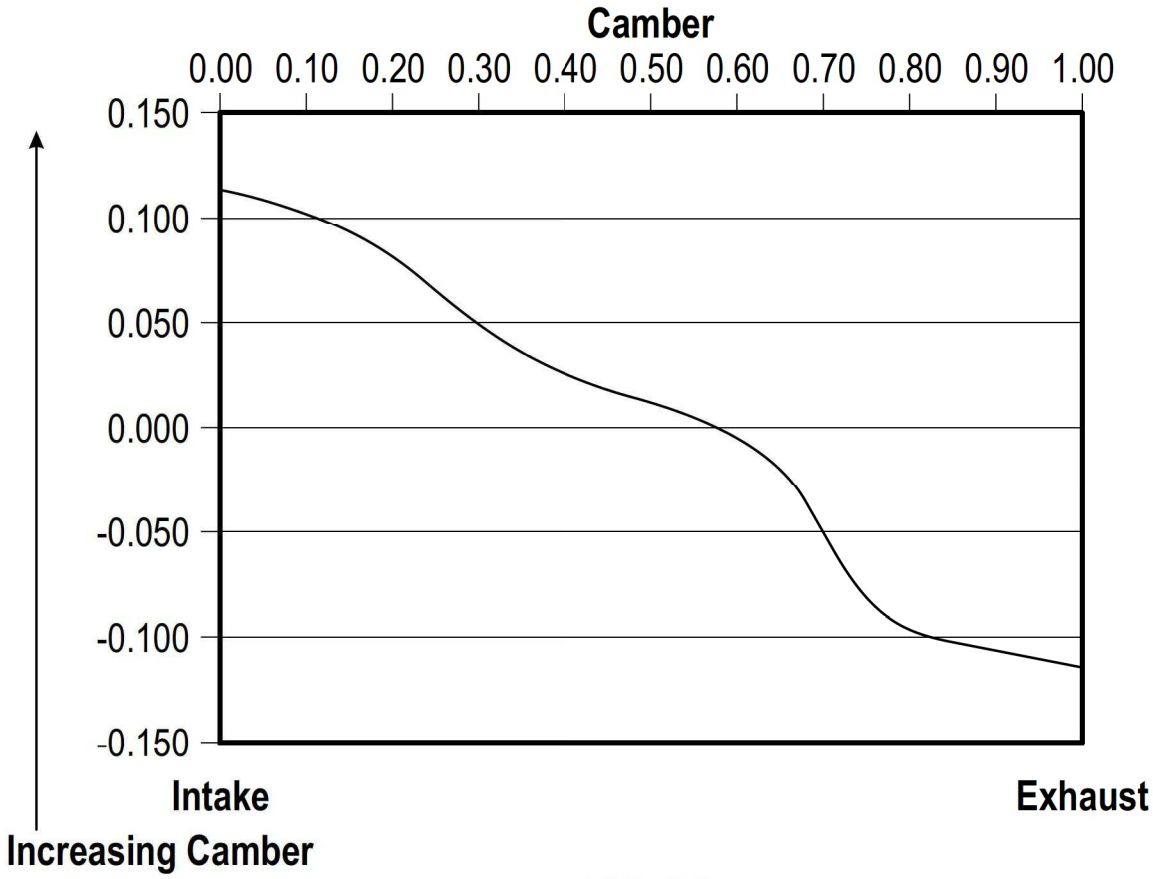

Camber
0.00 0.10 0.20 0.30 0.40 0.50 0.60 0.70 0.80 0.90 1.00
0.150
0.100
0.050
0.000
-0.050
-0.100
-0.150
Intake
Exhaust
Increasing Camber

FIG. 8G

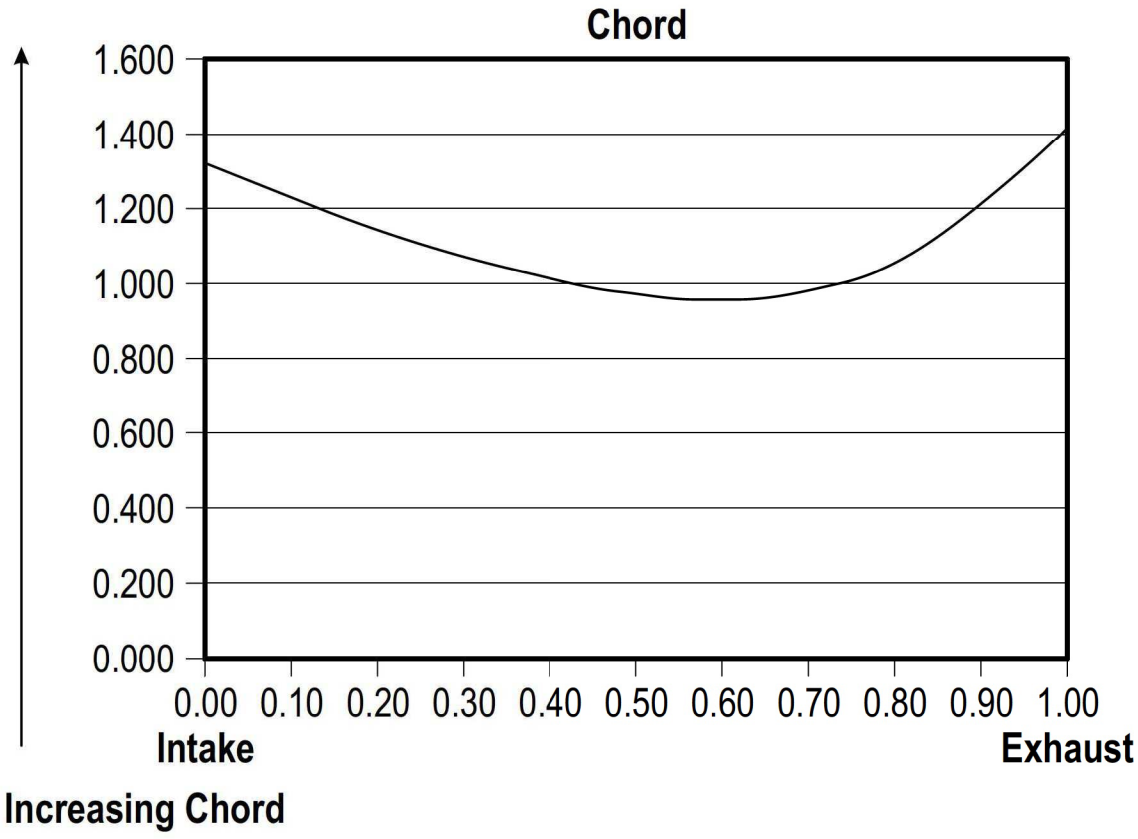

Chord
1.600
1.400
1.200
1.000
0.800
0.600
0.400
0.200
0.000
0.00 0.10 0.20 0.30 0.40 0.50 0.60 0.70 0.80 0.90 1.00
Intake
Exhaust
Increasing Chord

FIG. 8H

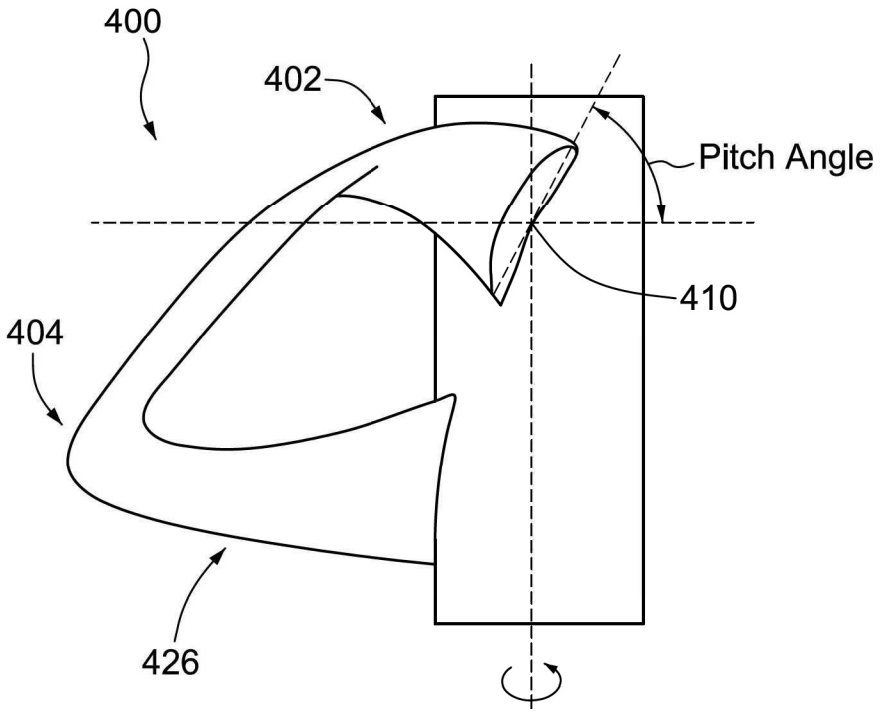


FIG. 9A

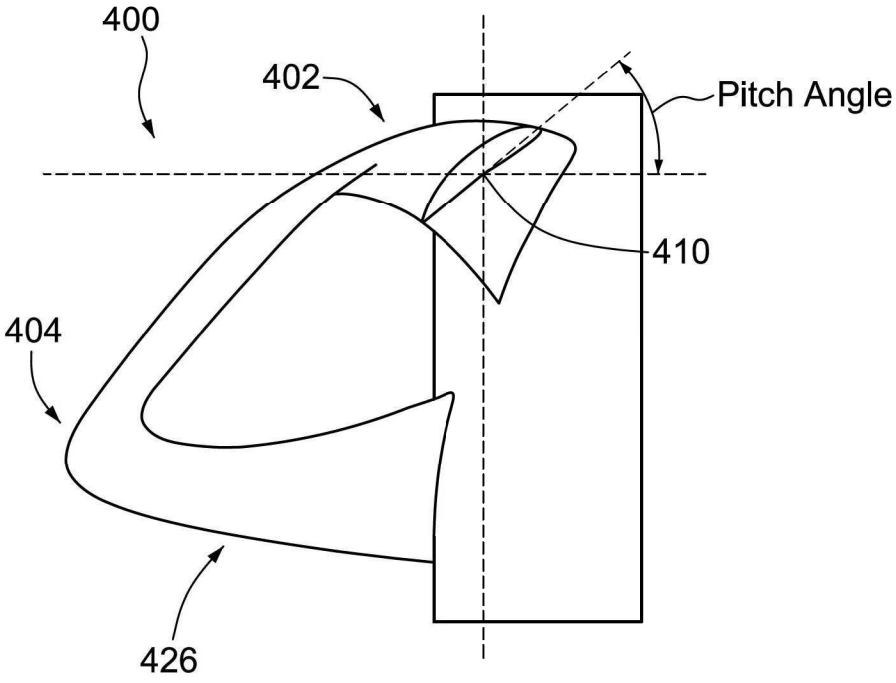


FIG. 9B

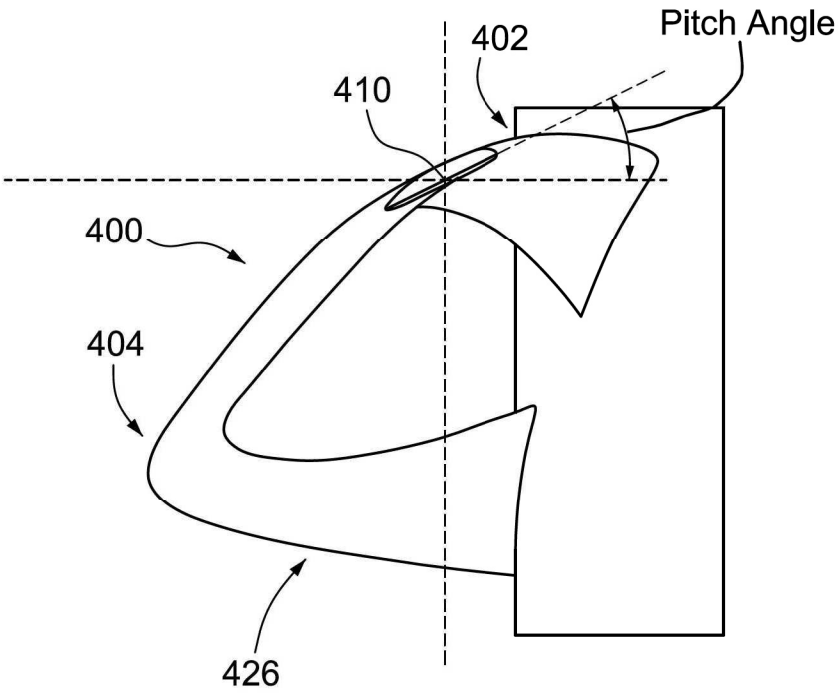


FIG. 9C

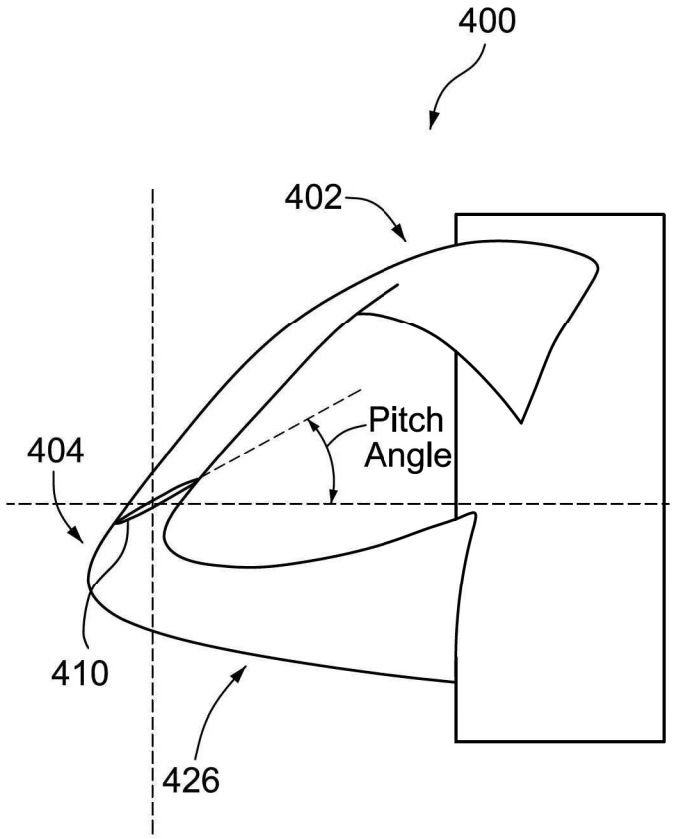


FIG. 9D

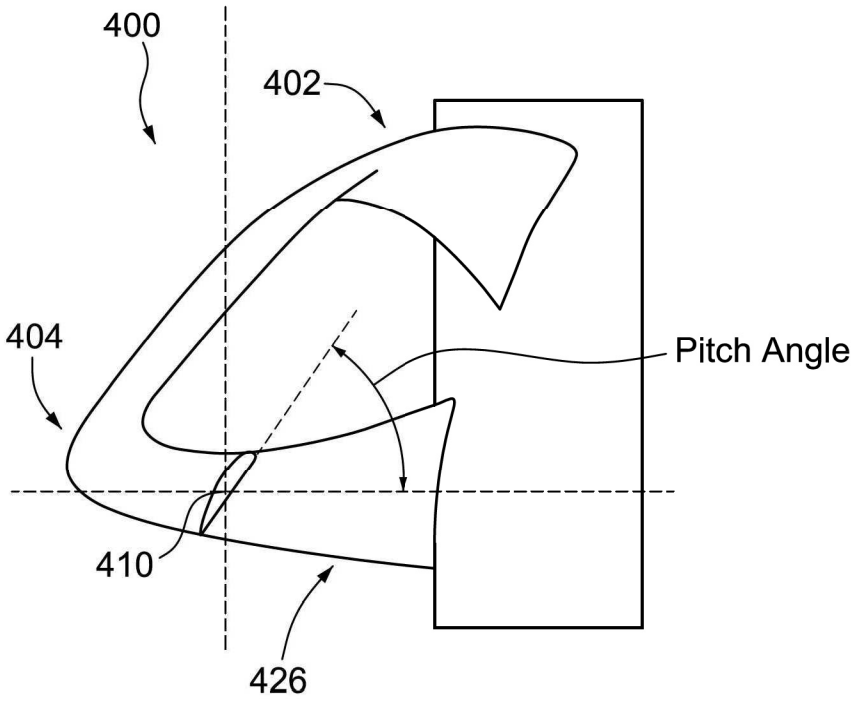


FIG. 9E

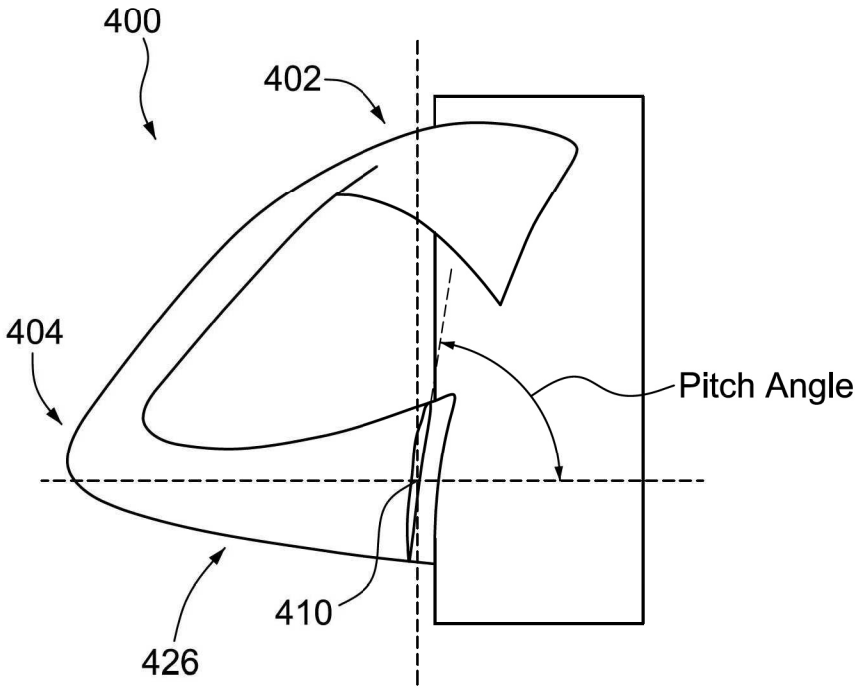


FIG. 9F

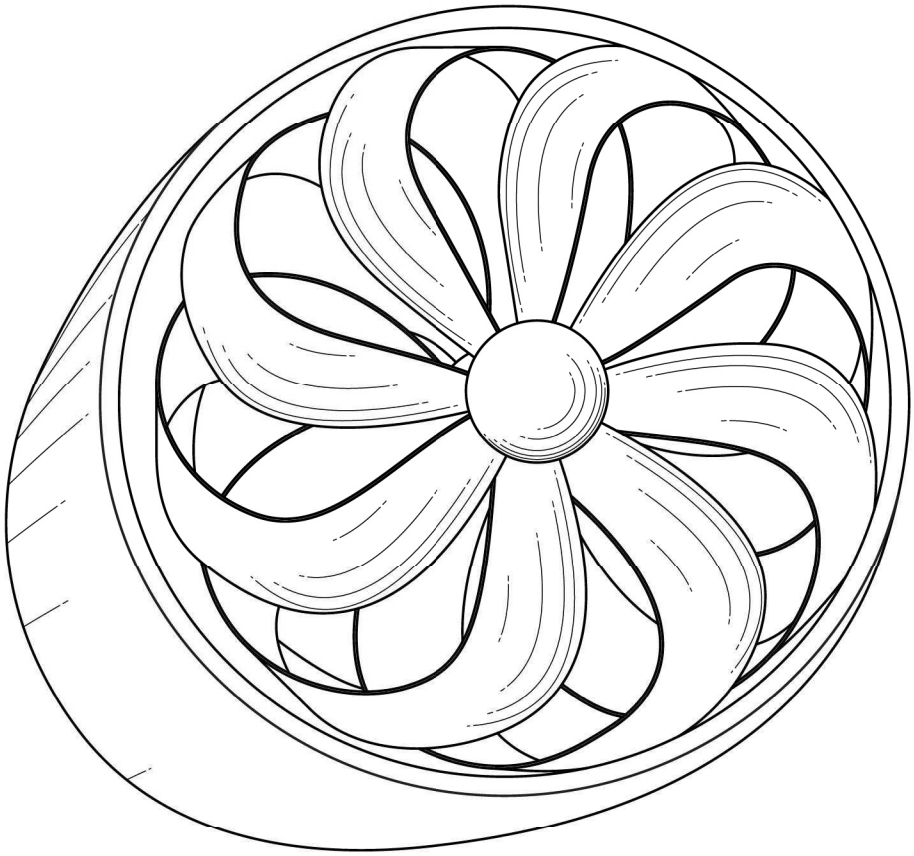


FIG. 10A

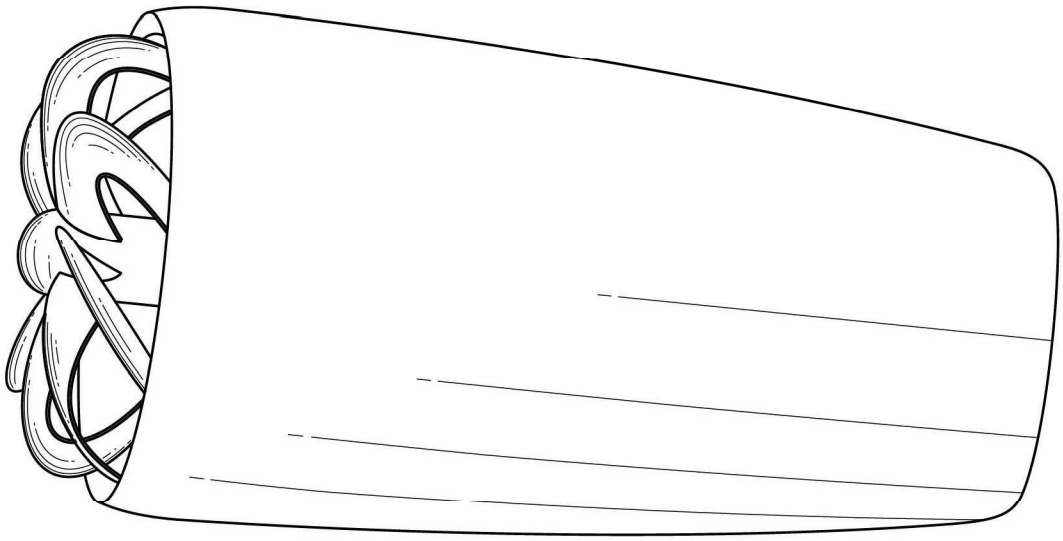


FIG. 10B

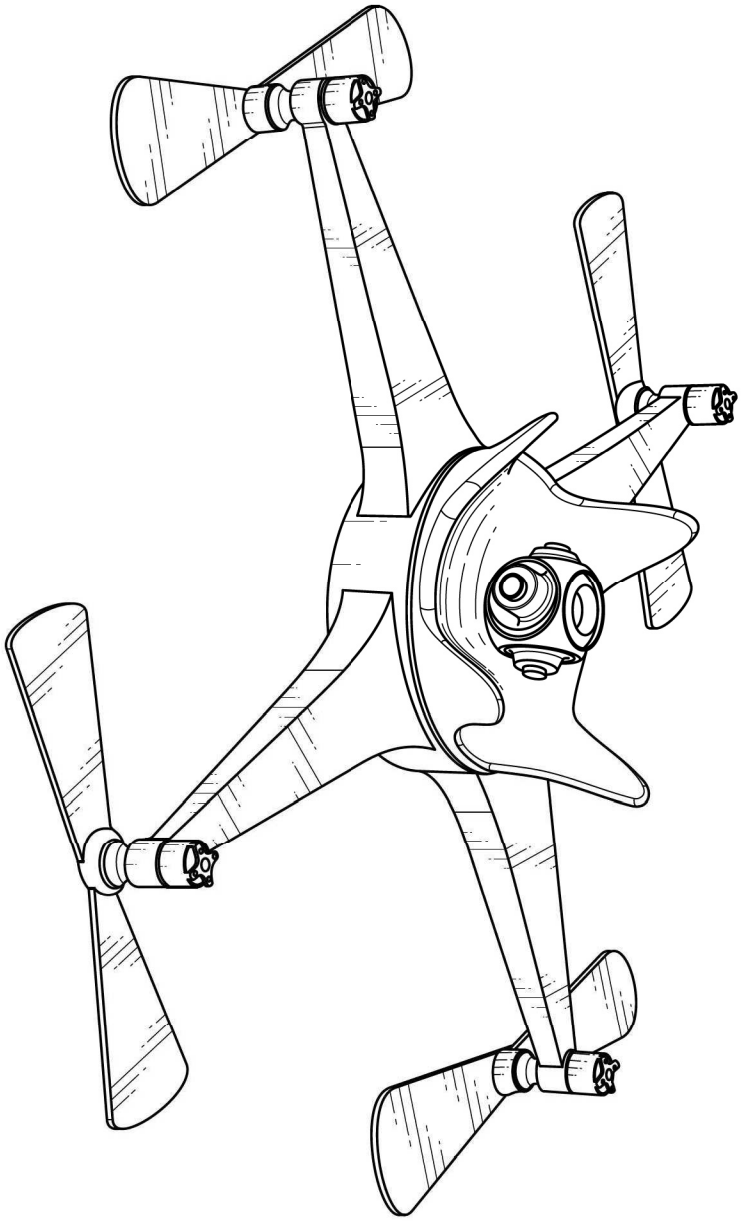


FIG. 11

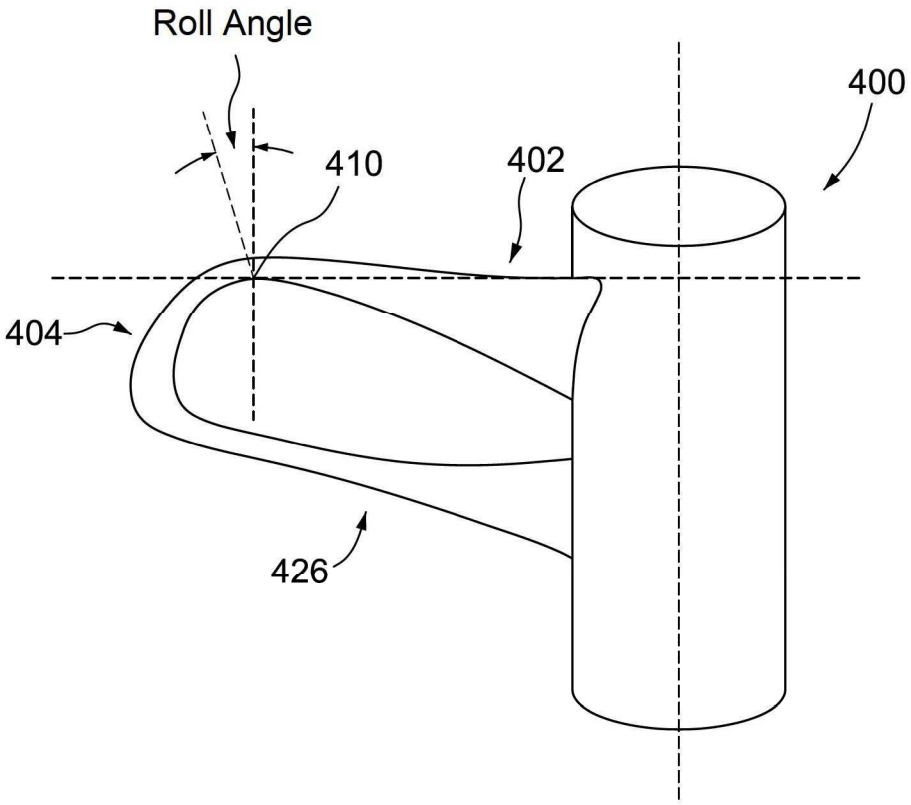


FIG. 12A

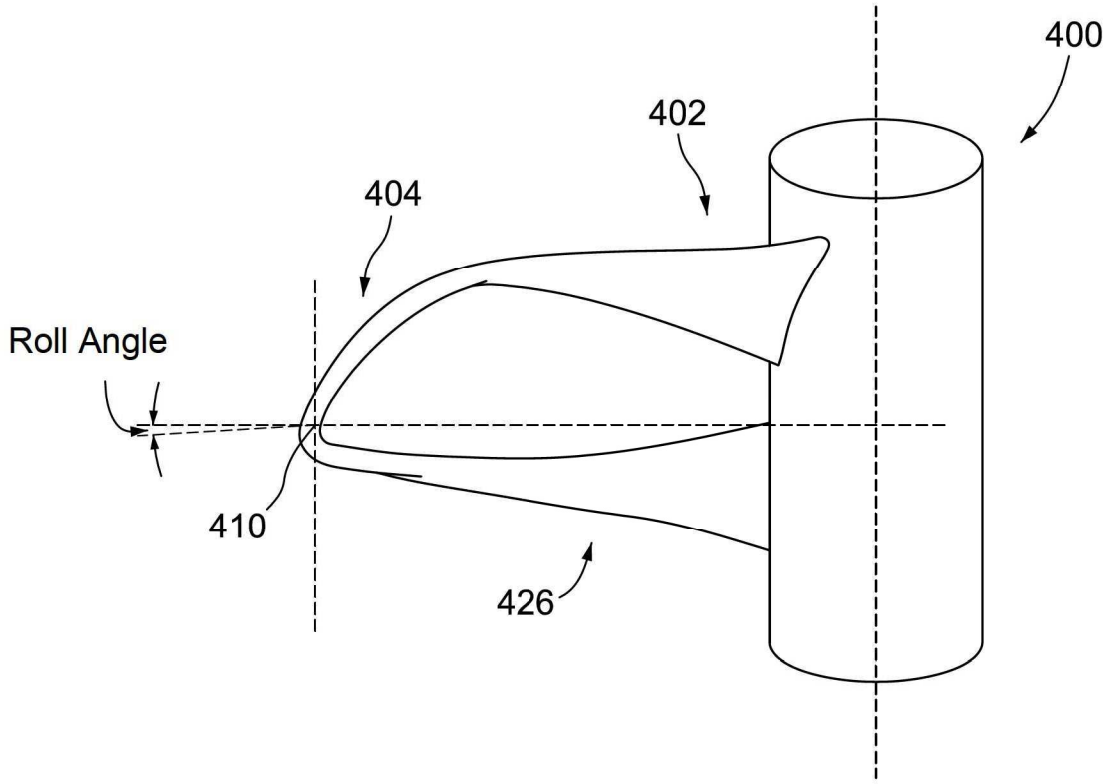


FIG. 12B

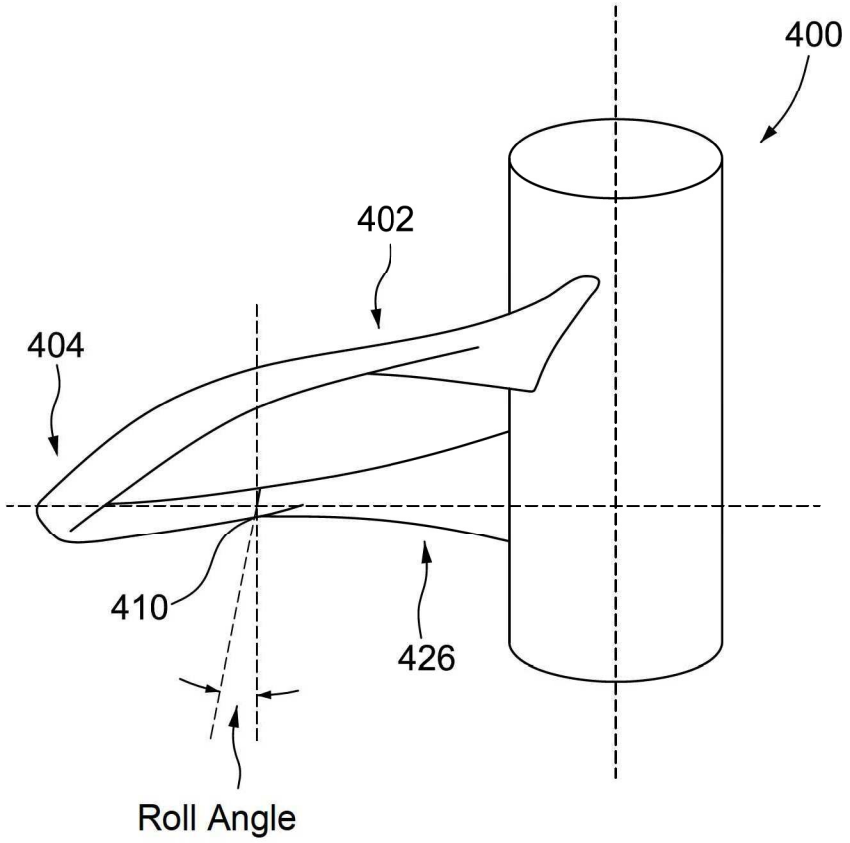


FIG. 12C

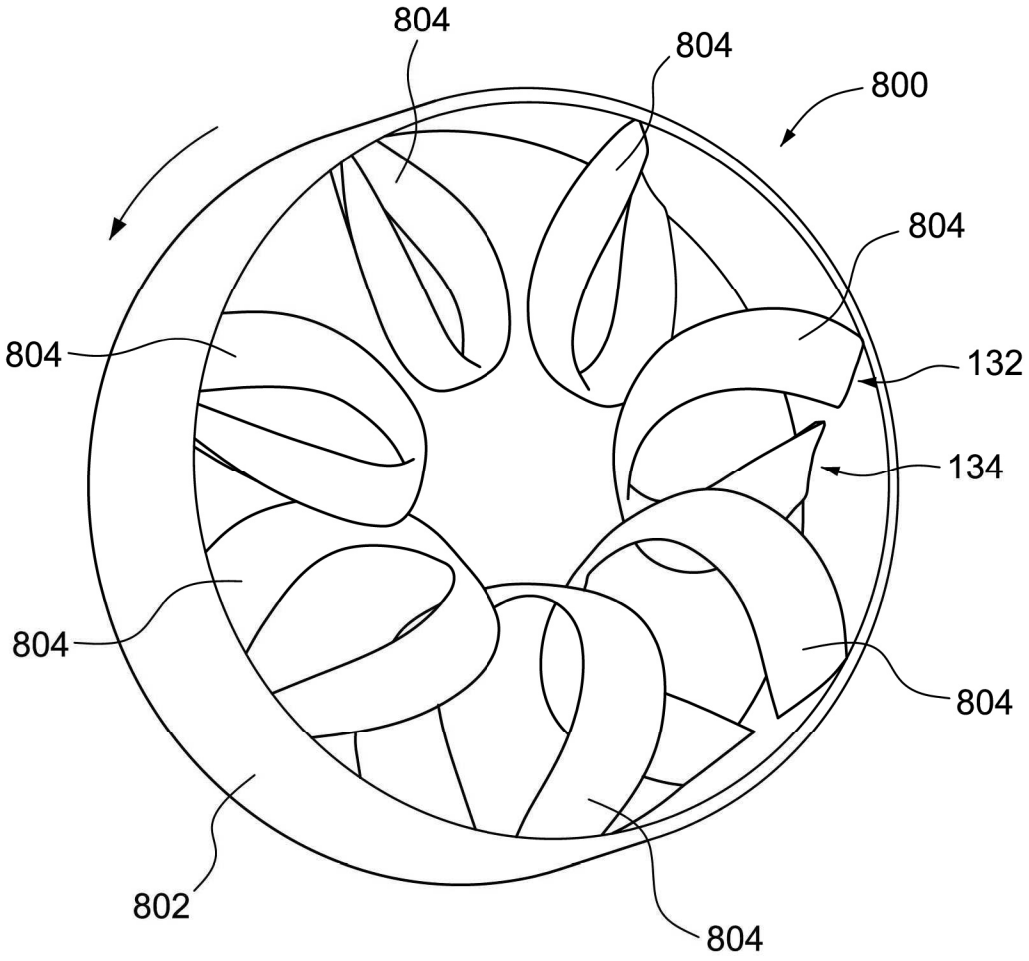


FIG. 13A

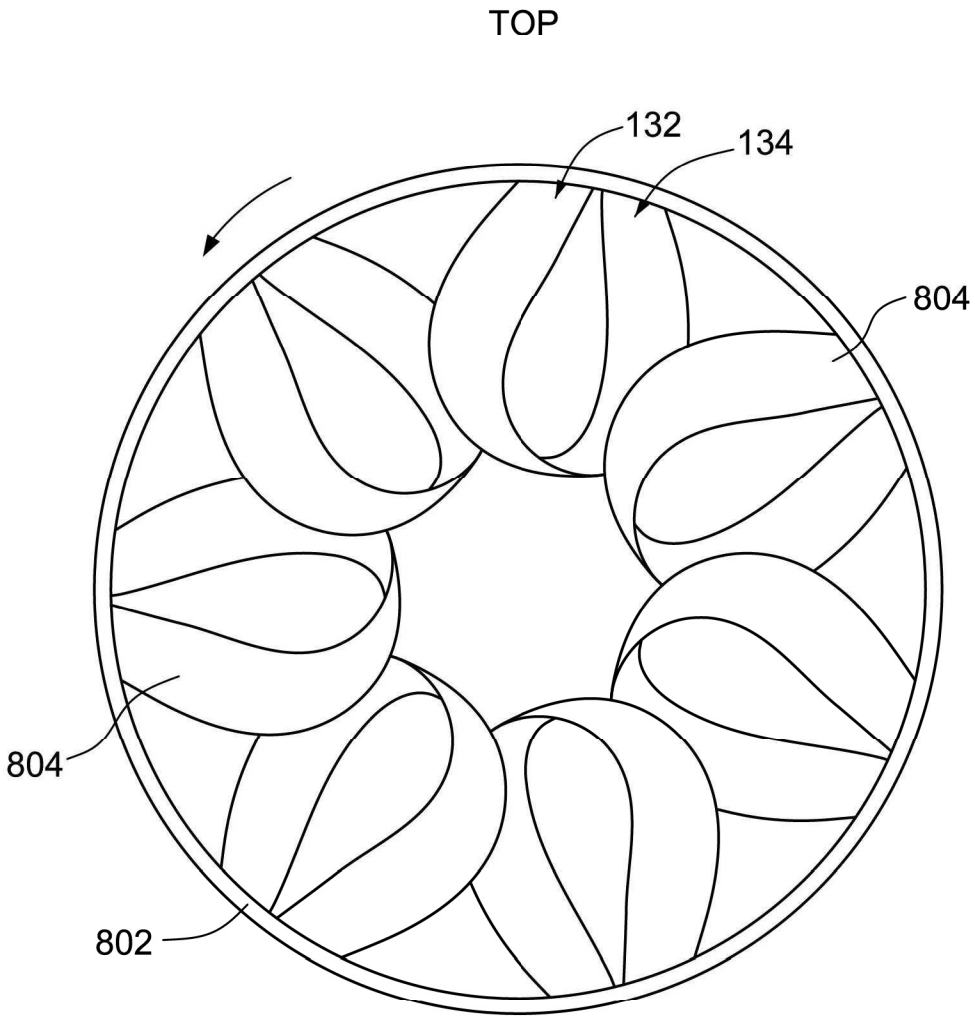


FIG. 13B

BOTTOM

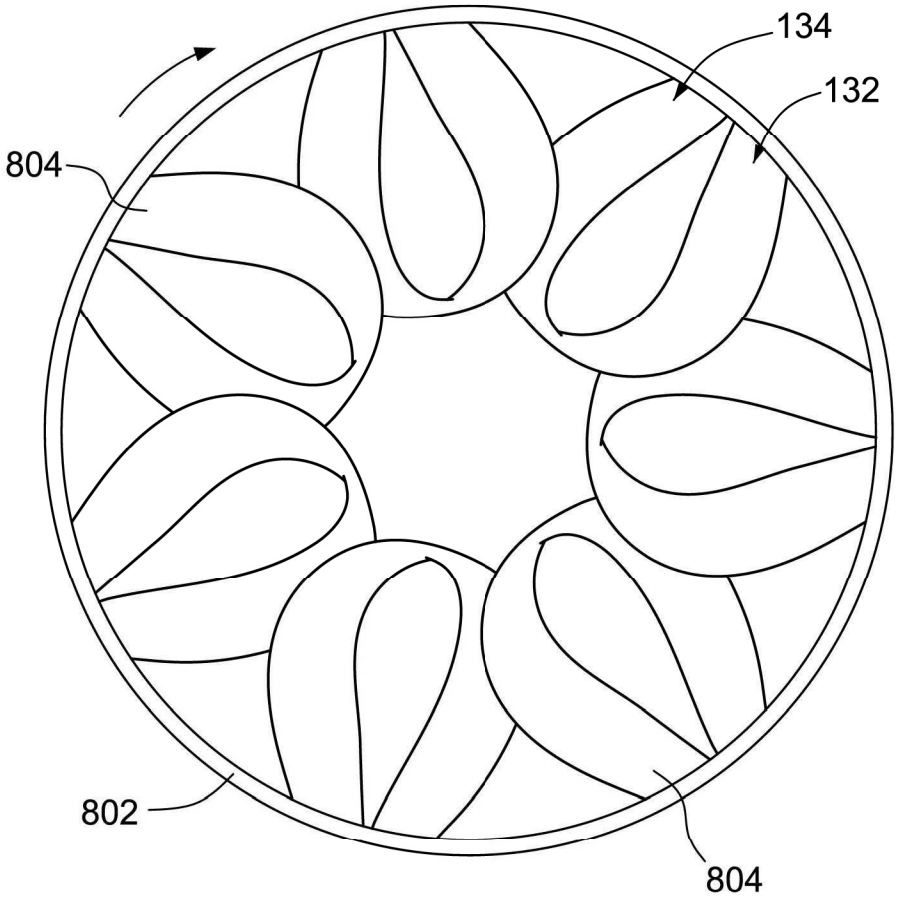


FIG. 13C

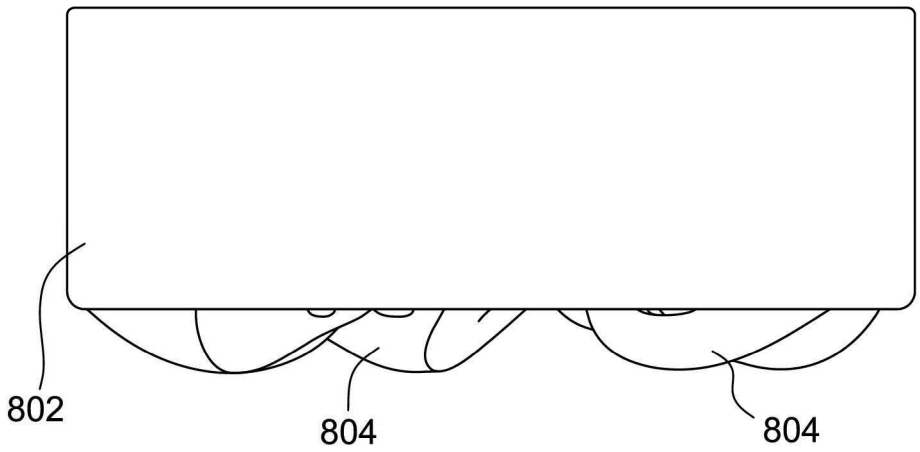


FIG. 13D

BACK

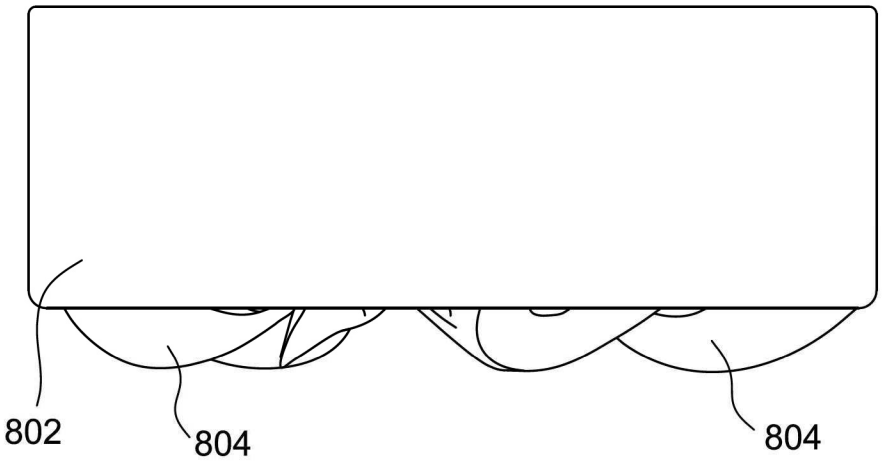


FIG. 13E

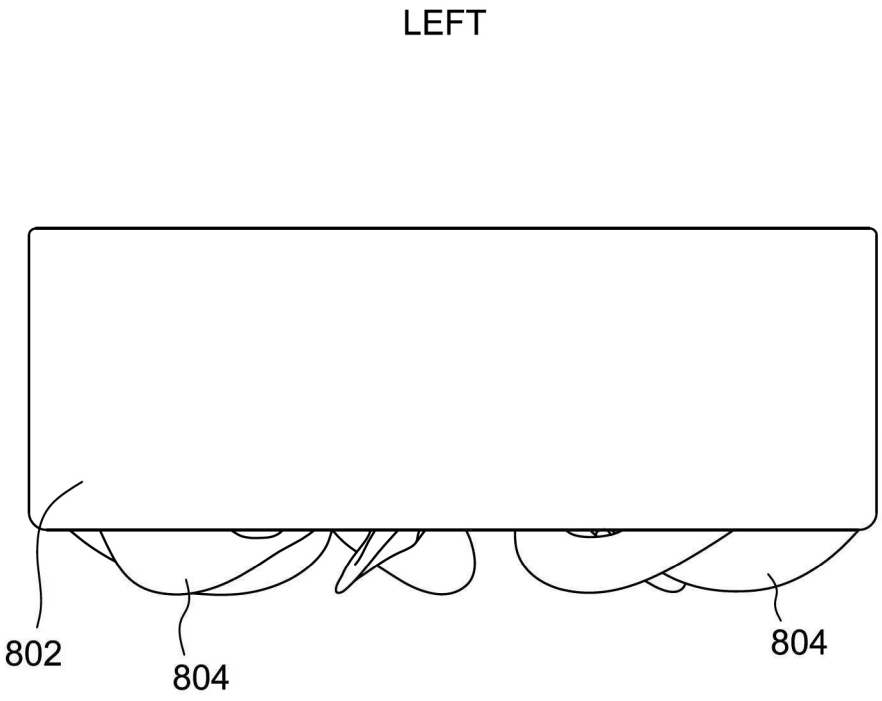


FIG. 13F

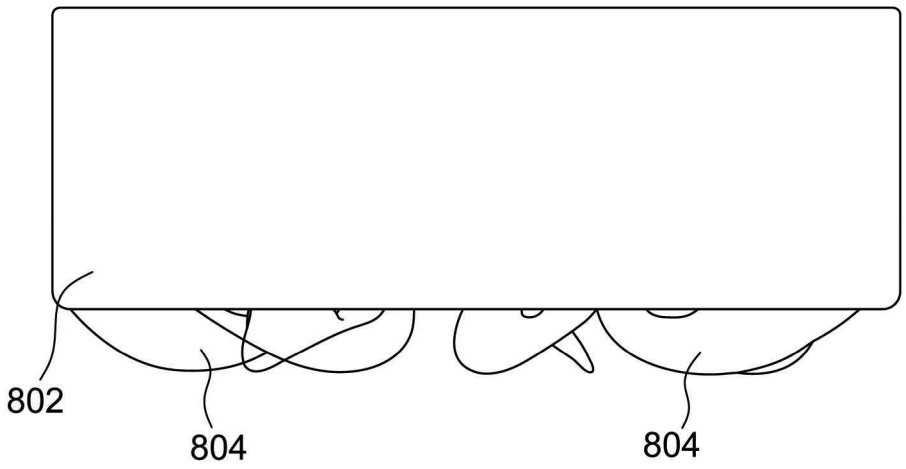


FIG. 13G

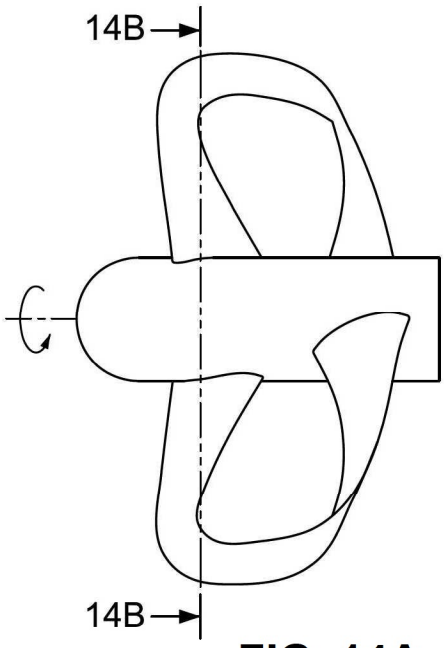


FIG. 14A

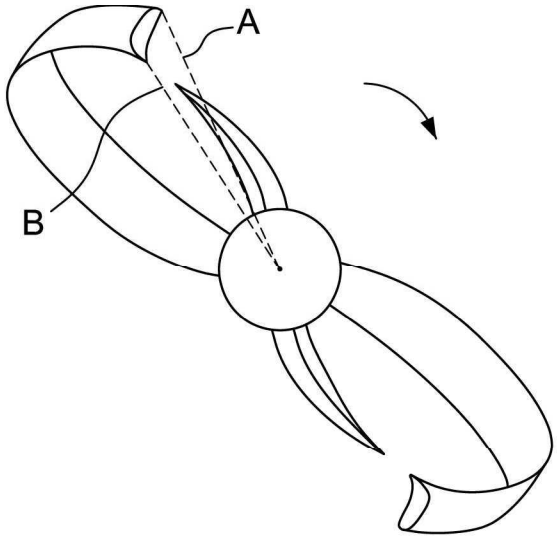


FIG. 14B

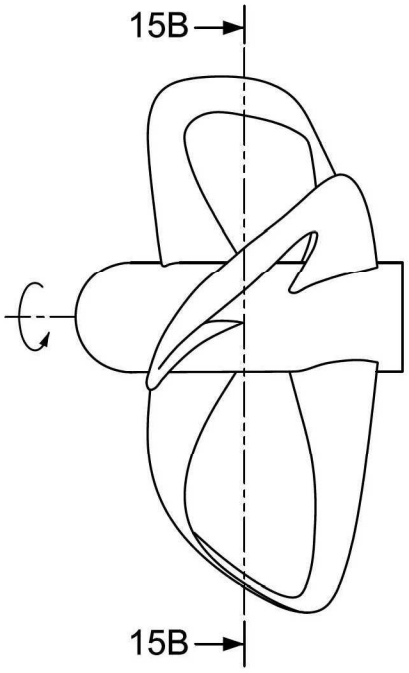


FIG. 15A

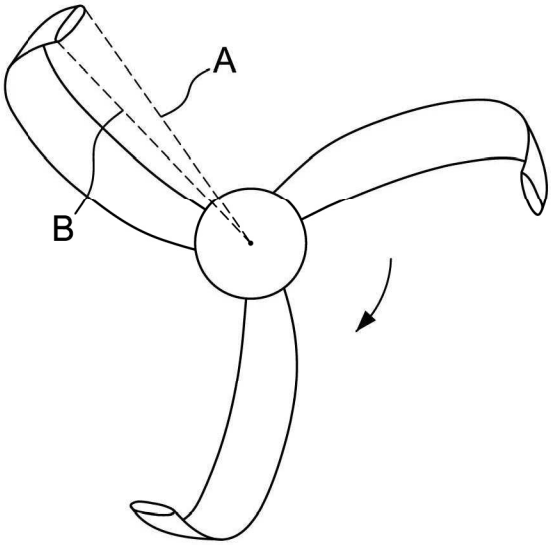


FIG. 15B

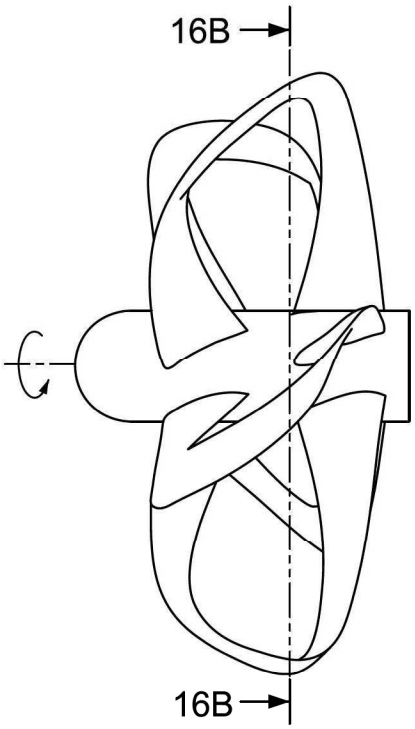


FIG. 16A

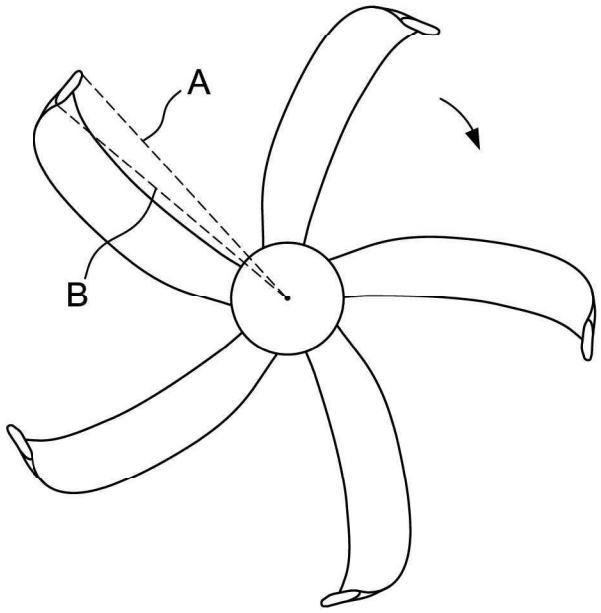


FIG. 16B

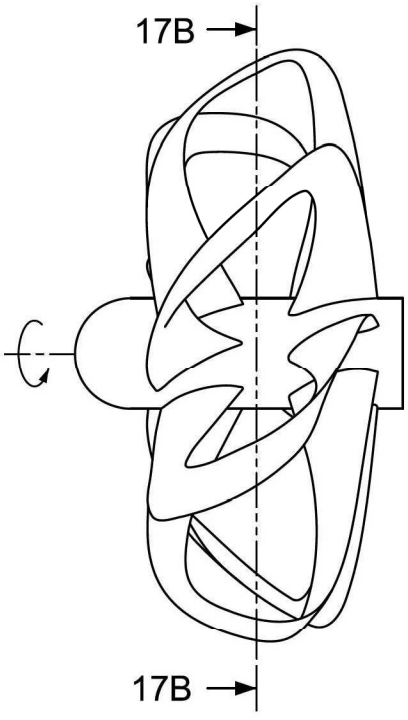


FIG. 17A

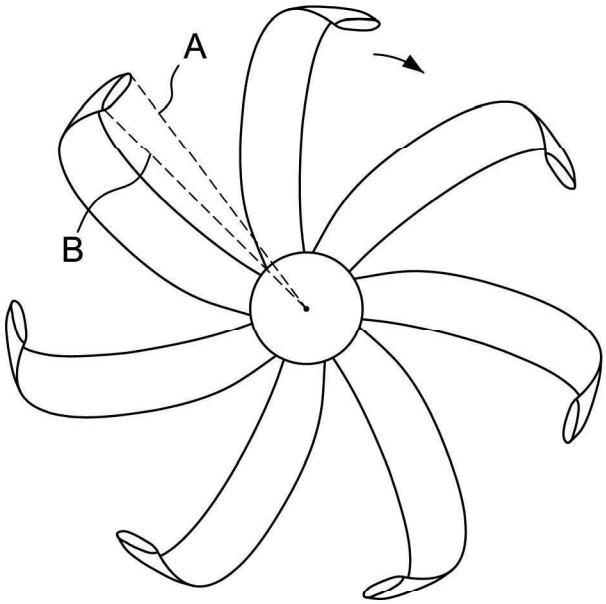


FIG. 17B

High Rake for Intake

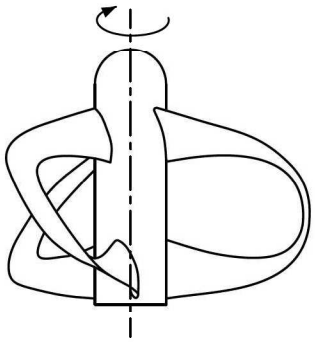


FIG. 18A ("Left")

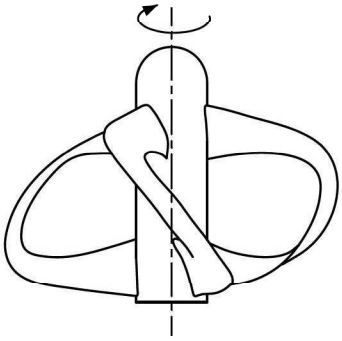


FIG. 18B ("Front")

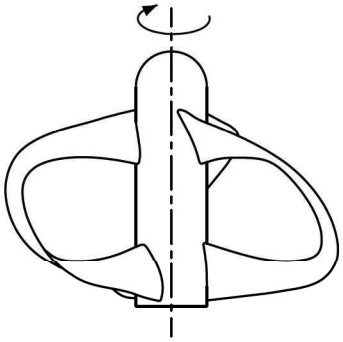


FIG. 18C (Back)

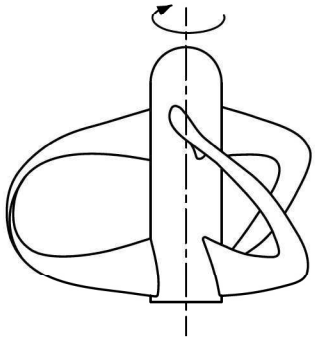


FIG. 18D (Right)

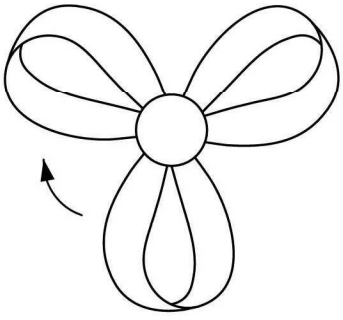


FIG. 18E (Top)

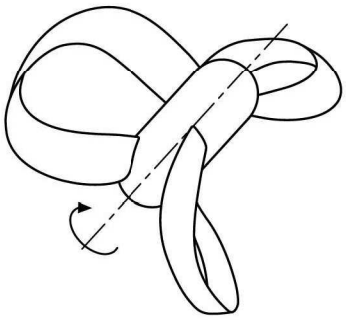


FIG. 18F (Perspective)

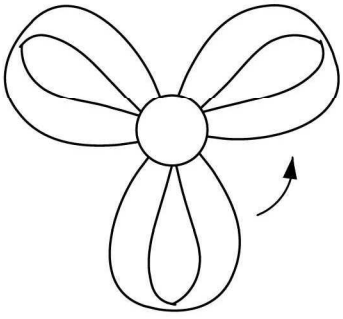


FIG. 18G (Bottom)

High Rake for Intake & Exhaust

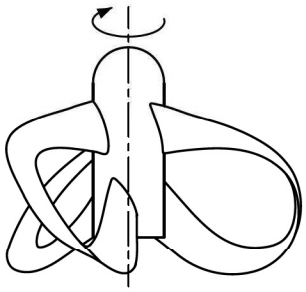


FIG. 19A ("Left")

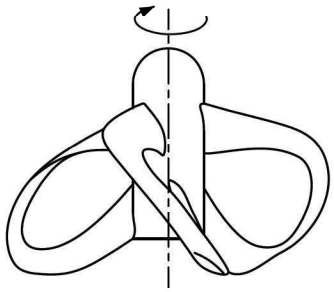


FIG. 19B ("Front")

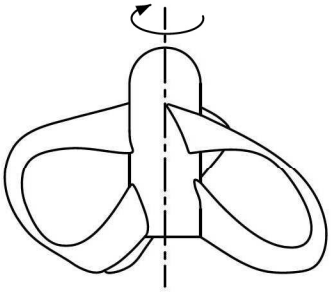


FIG. 19C (Back)

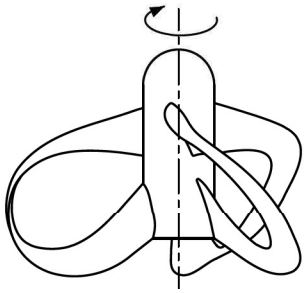


FIG. 19D (Right)

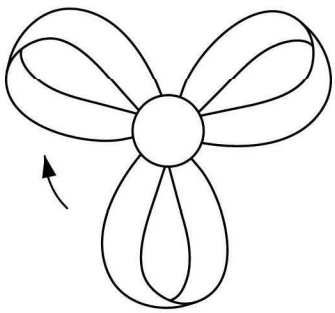
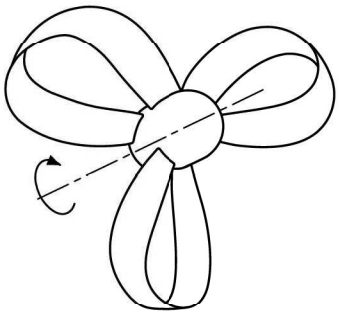


FIG. 19E (Top)



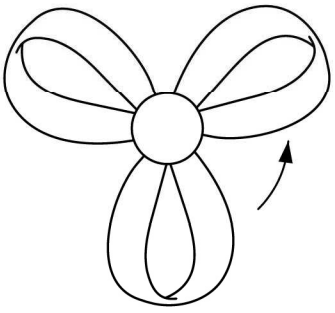


FIG. 19G (Bottom)

FIG. 19F (Perspective)

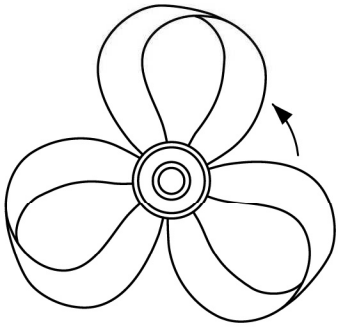


FIG. 20A ("Top")

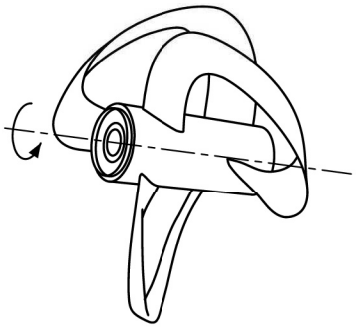


FIG. 20B (Perspective)

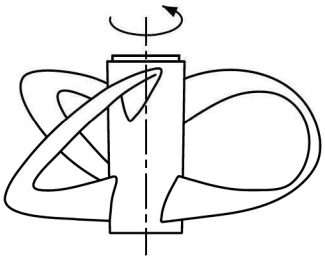


FIG. 20C ("Right")

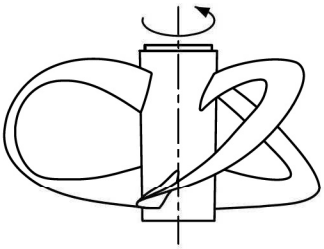
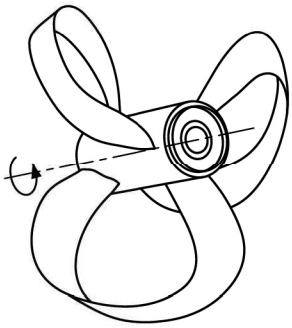


FIG. 20D ("Left")



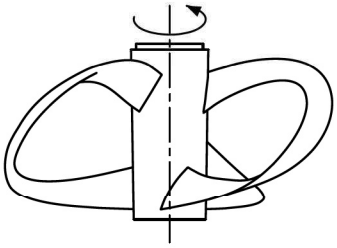


FIG. 20F ("Front")

FIG. 20E (Perspective)

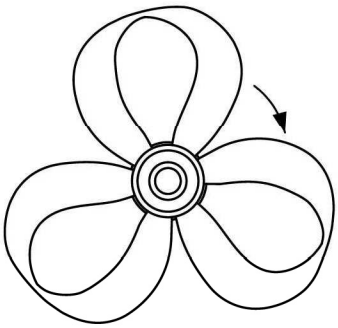
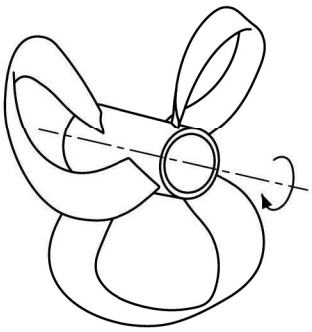


FIG. 20G (Bottom)



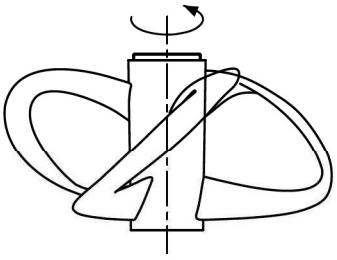


FIG. 20I ("Back")

FIG. 20H (Perspective)

Through Hub Exhaust

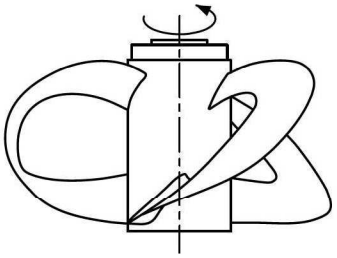


FIG. 21A ("Left")

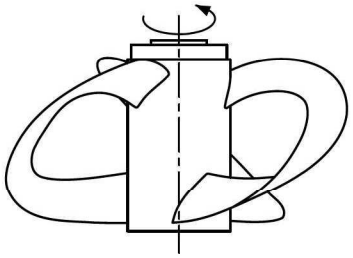


FIG. 21B ("Front")

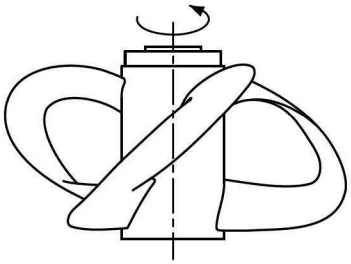


FIG. 21C ("Back")

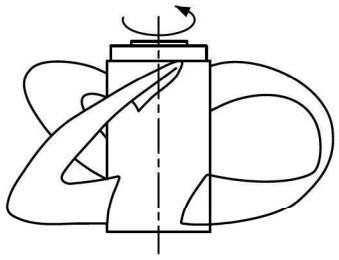


FIG. 21D ("Right")

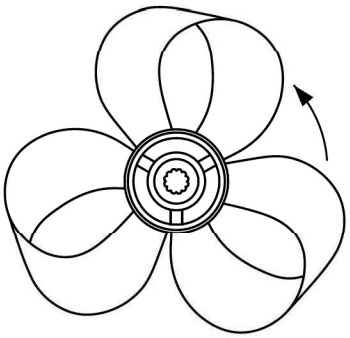
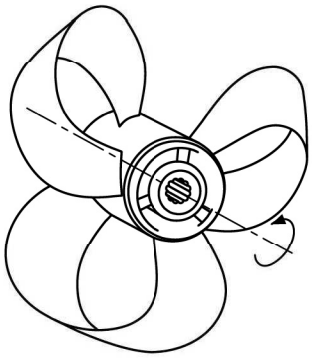


FIG. 21E (Top)



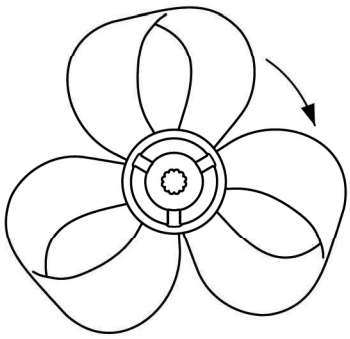


FIG. 21F (Bottom)

FIG. 21F (Perspective)