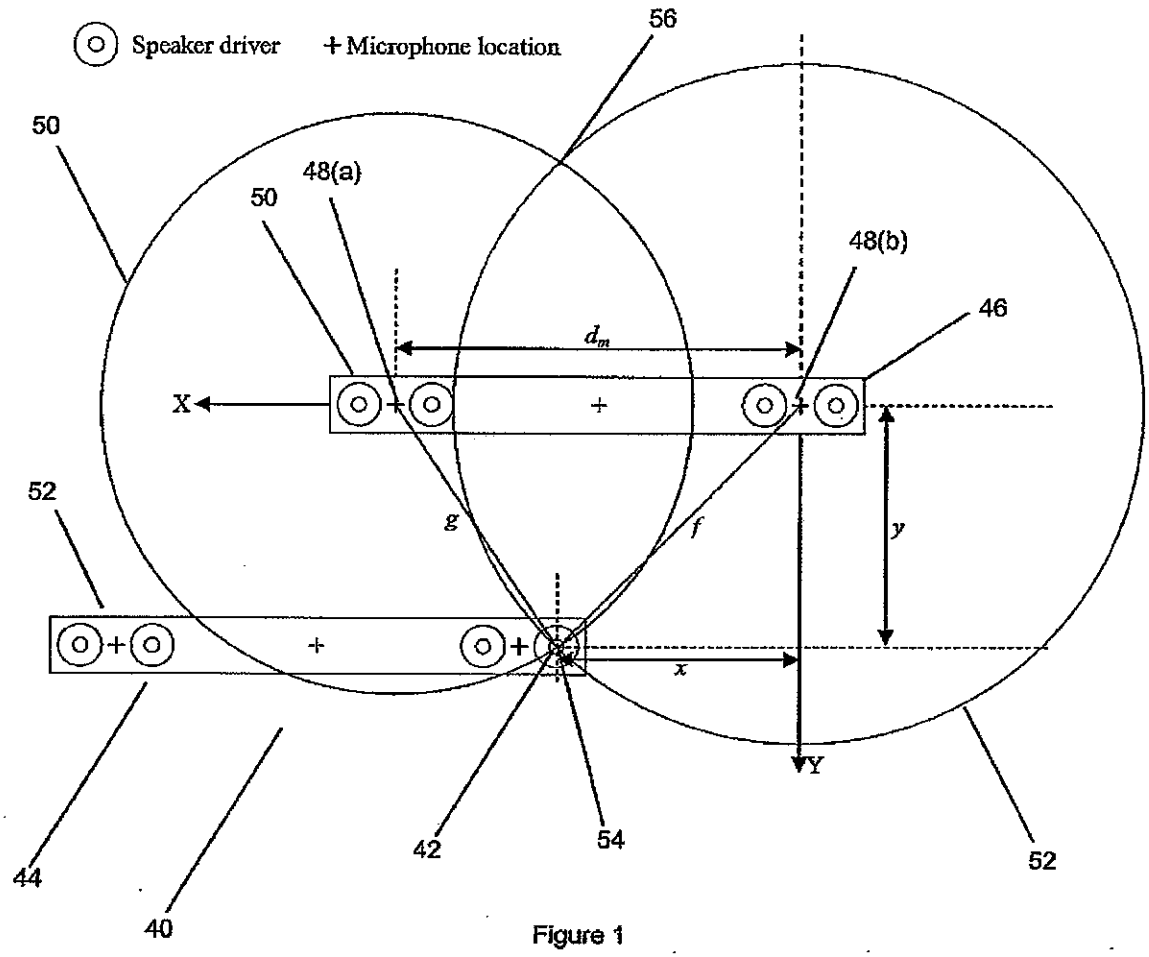

Speaker driver
+ Microphone location
56
50
48(a)
50
48(b)
46
d_m
X
52
g
f
y
x
Y
44
40
42
54
52

Figure 1

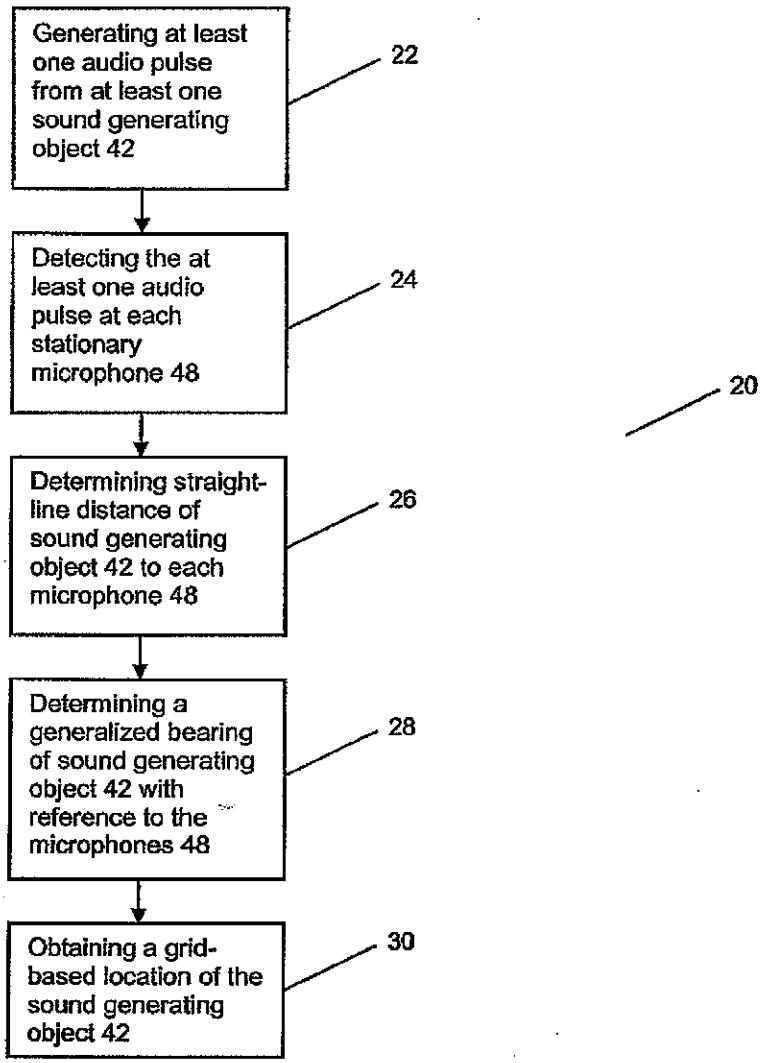

Generating at least one audio pulse from at least one sound generating object 42
22
Detecting the at least one audio pulse at each stationary microphone 48
24
20
Determining straight-line distance of sound generating object 42 to each microphone 48
26
Determining a generalized bearing of sound generating object 42 with reference to the microphones 48
28
Obtaining a grid-based location of the sound generating object 42
30

Figure 2

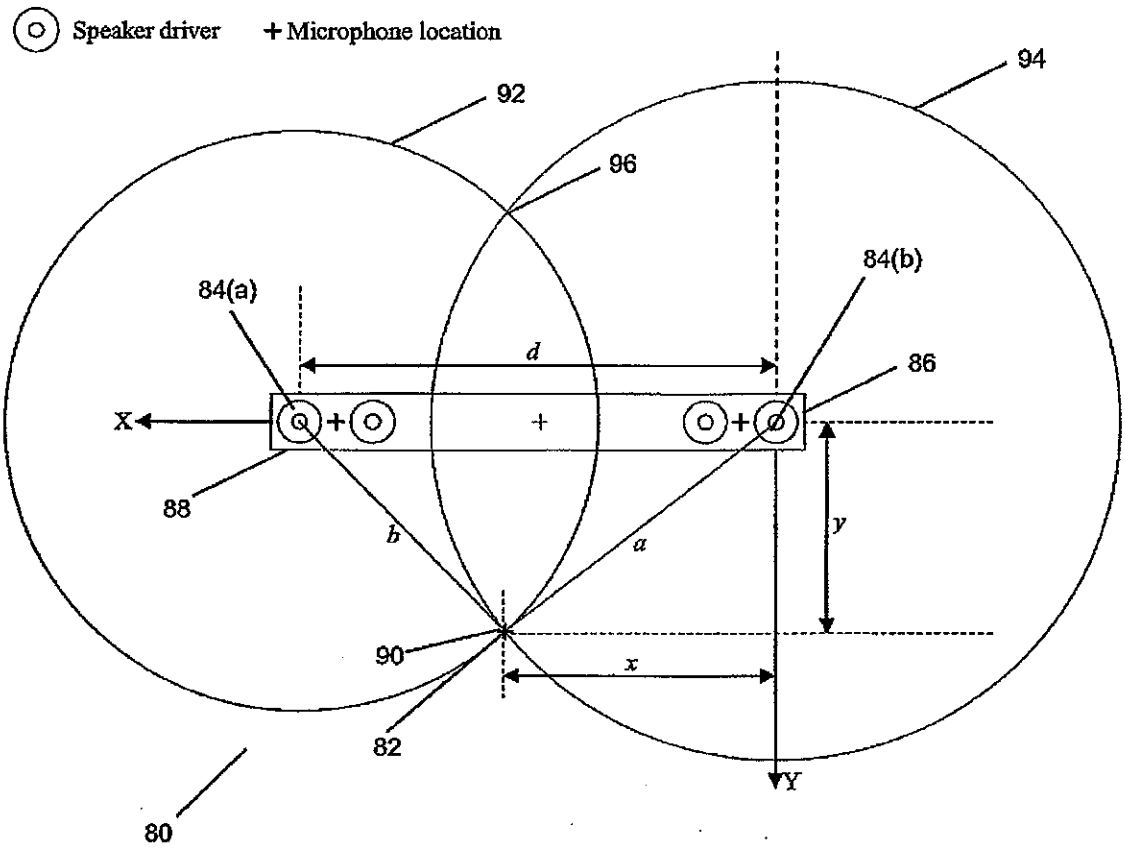

Speaker driver
+ Microphone location
94
92
96
84(b)
84(a)
d
86
X
88
b
a
y
90
x
82
Y
80

Figure 3

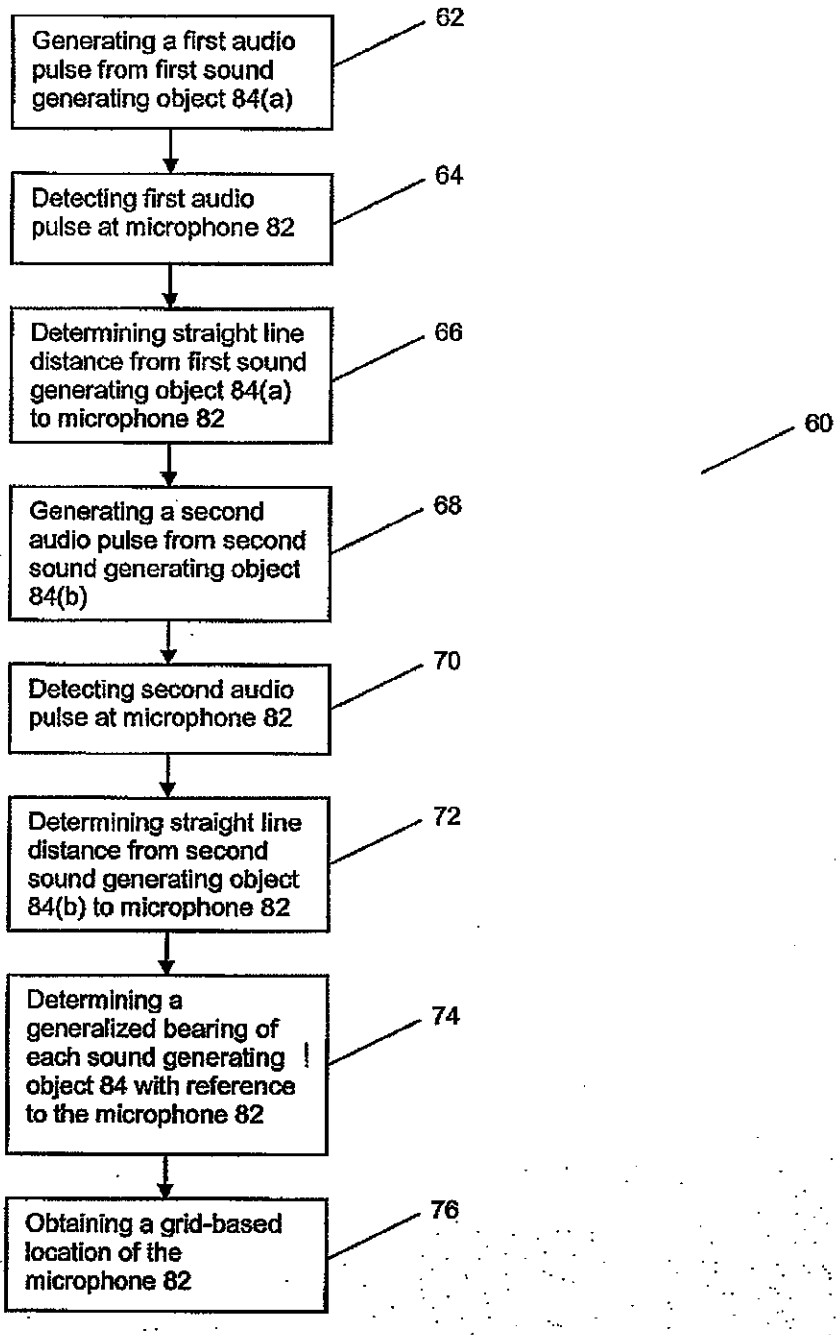

Generating a first audio pulse from first sound generating object 84(a)
62
Detecting first audio pulse at microphone 82
64
Determining straight line distance from first sound generating object 84(a) to microphone 82
66
60
Generating a second audio pulse from second sound generating object 84(b)
68
Detecting second audio pulse at microphone 82
70
Determining straight line distance from second sound generating object 84(b) to microphone 82
72
Determining a generalized bearing of each sound generating object 84 with reference to the microphone 82
74
Obtaining a grid-based location of the microphone 82
76

Figure 4