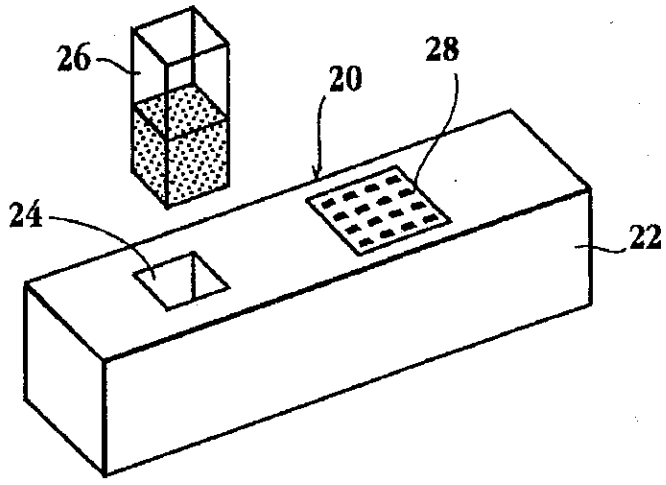

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Fig. 1

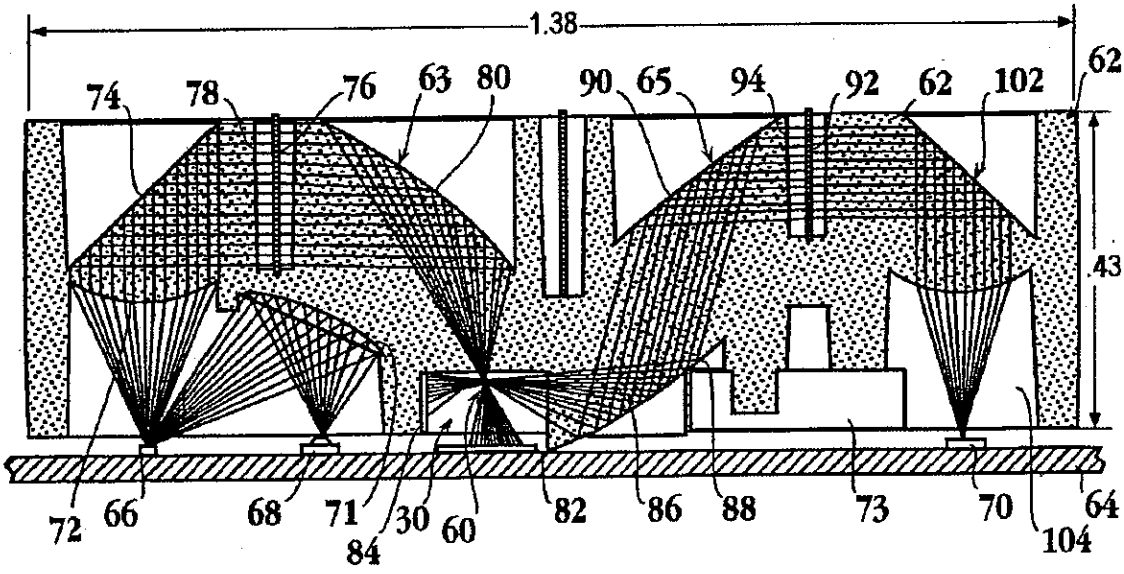

1.38
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Fig. 2

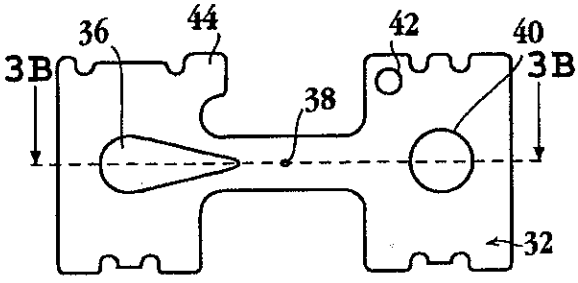



Fig. 3A

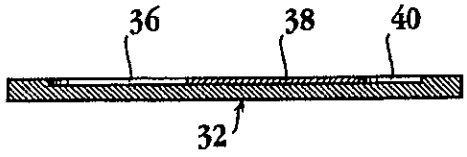



Fig. 3B

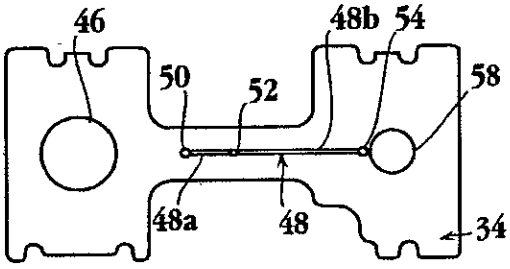



Fig. 3C

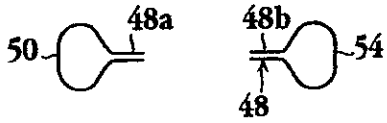



Fig. 3D

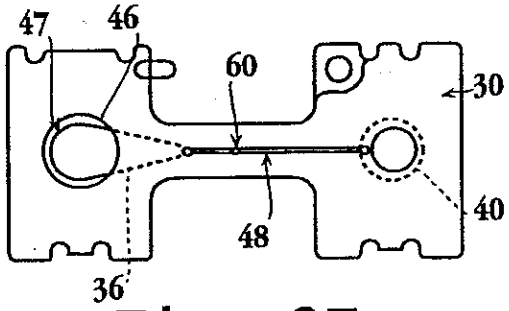



Fig. 3F

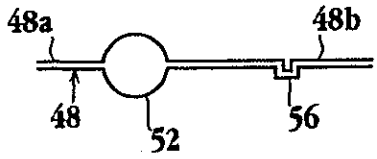



Fig. 3E

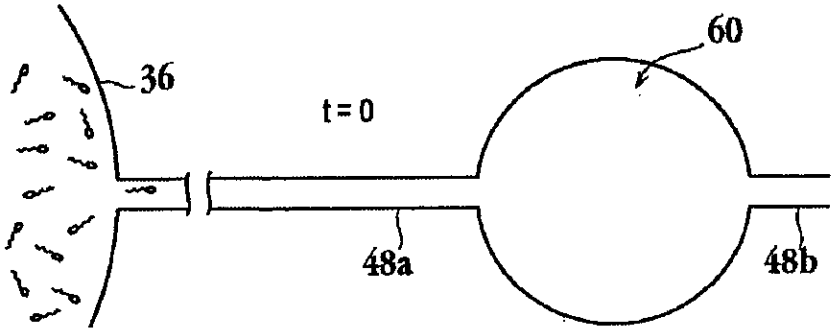



Fig. 4A

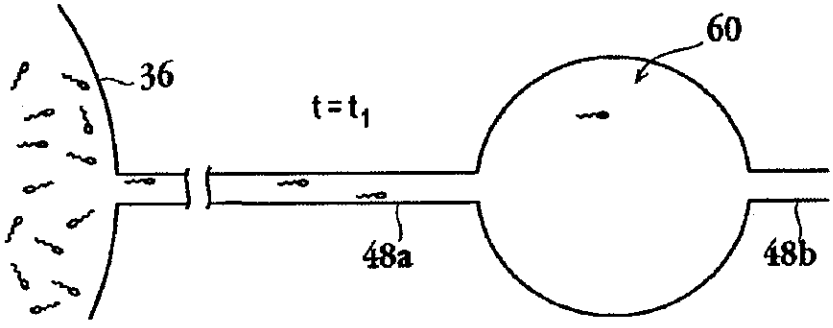



Fig. 4B

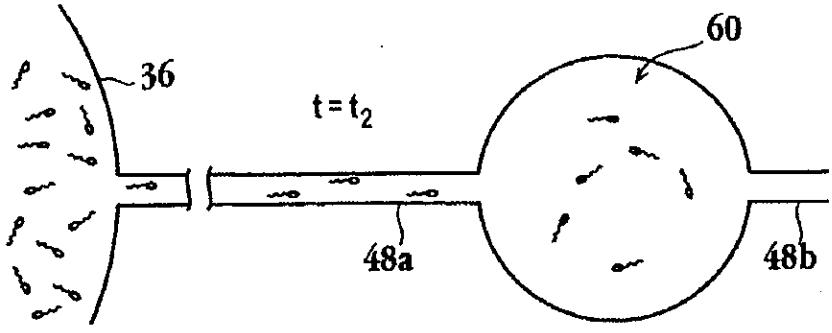



Fig. 4C

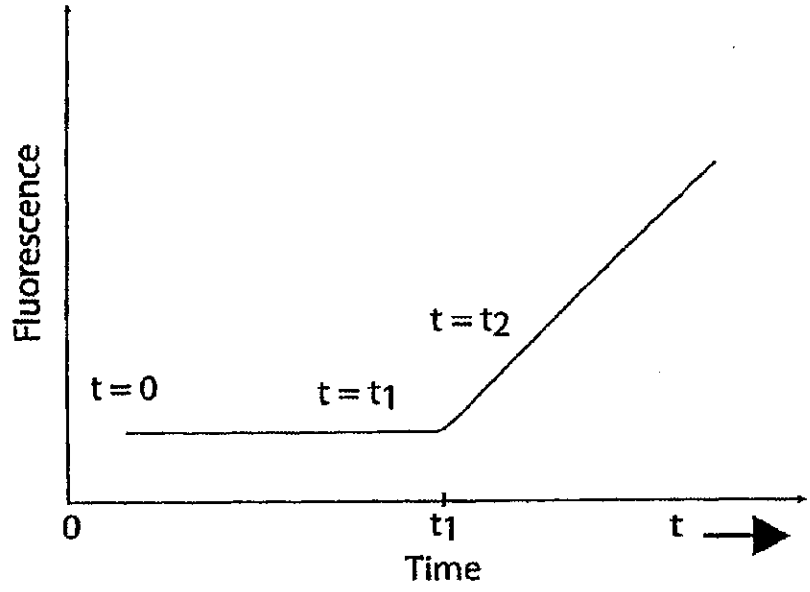

Fluorescence
t = 0
t = t1
t = t2
0
t1
t
Time

Fig. 5

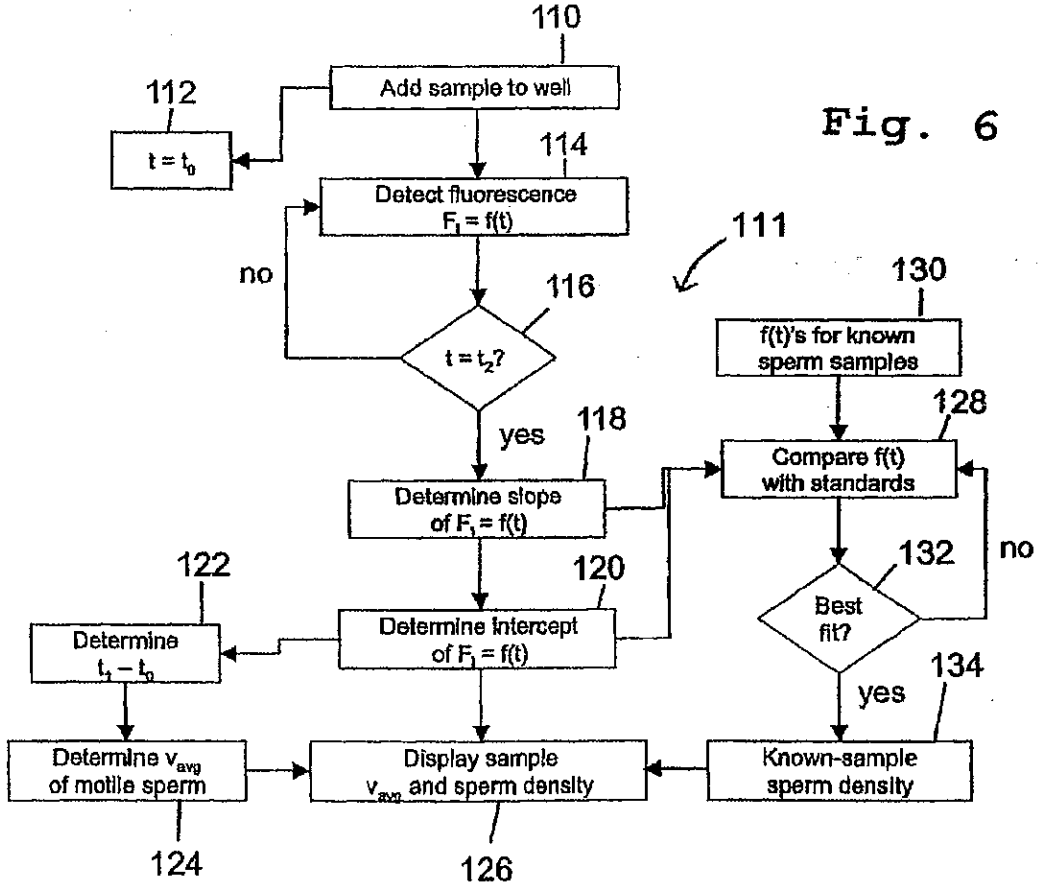

110
Add sample to well
112
t = t0
114
Detect fluorescence
F1 = f(t)
no
116
t = t2?
yes
118
Determine slope
of F1 = f(t)
120
Determine intercept
of F1 = f(t)
122
Determine
t1 – t0
Determine vavg
of motile sperm
124
Display sample
vavg and sperm density
126
111
130
f(t)'s for known
sperm samples
128
Compare f(t)
with standards
132
Best
fit?
no
yes
134
Known-sample
sperm density

Fig. 6

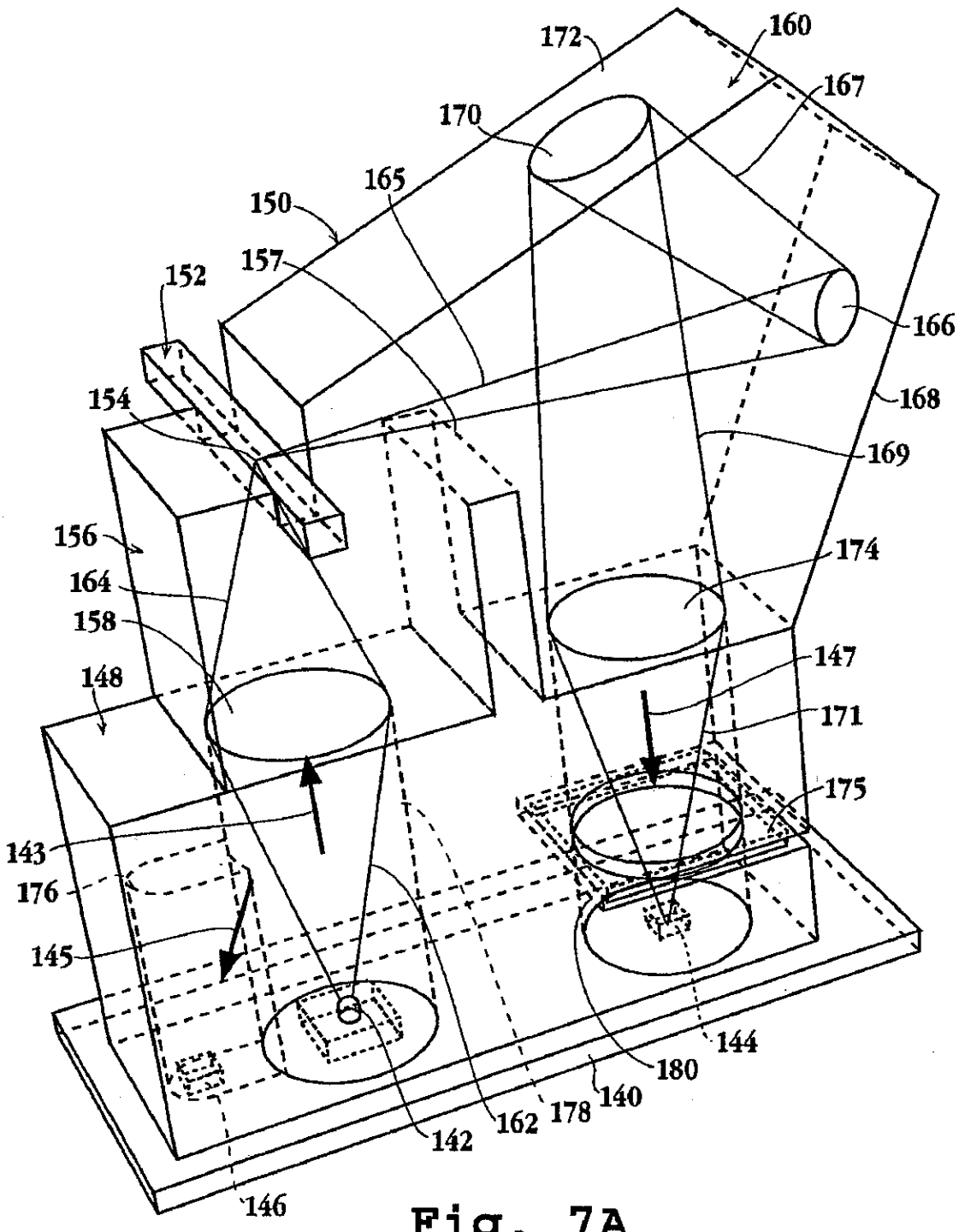

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Fig. 7A

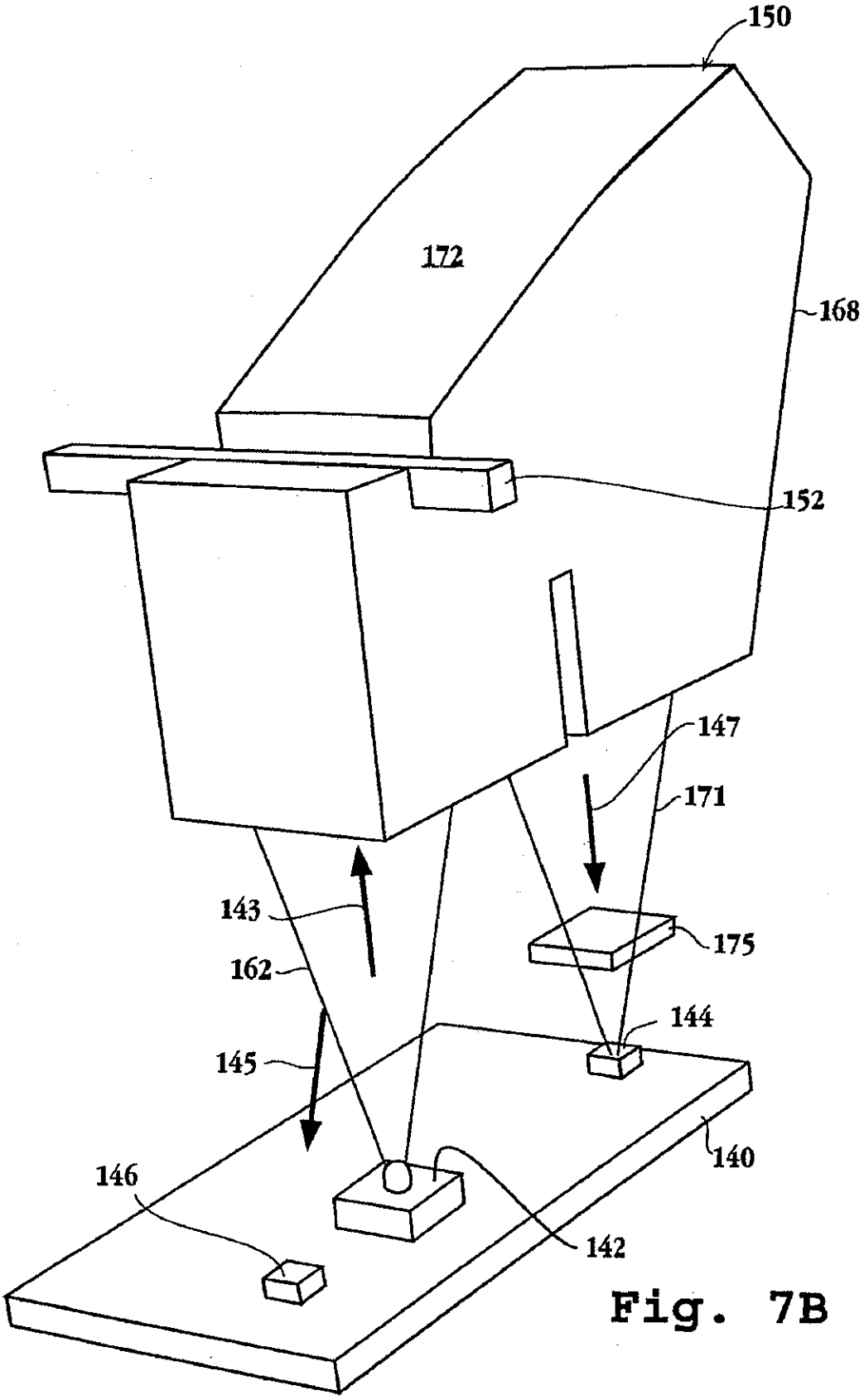



Fig. 7B

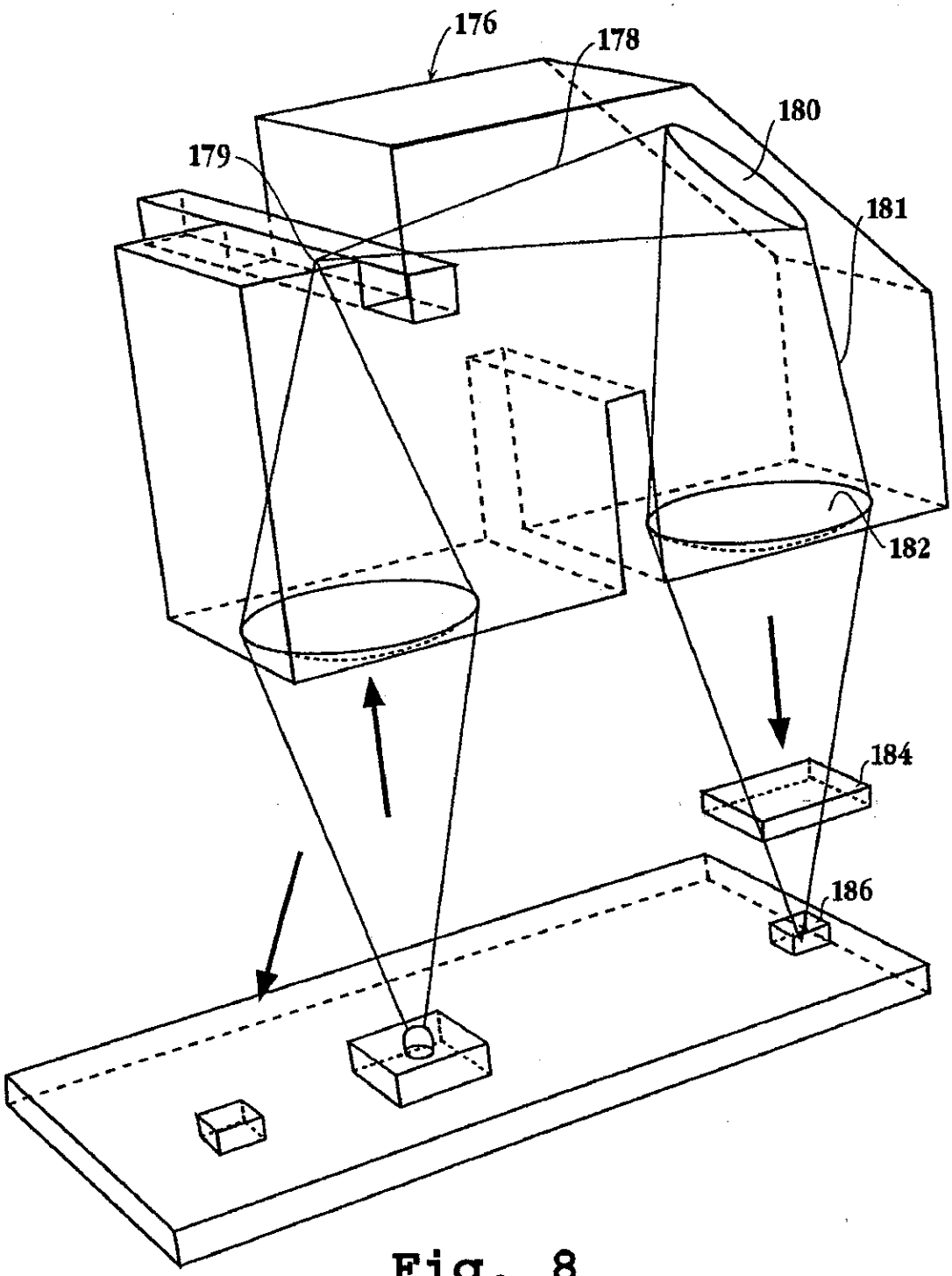



Fig. 8

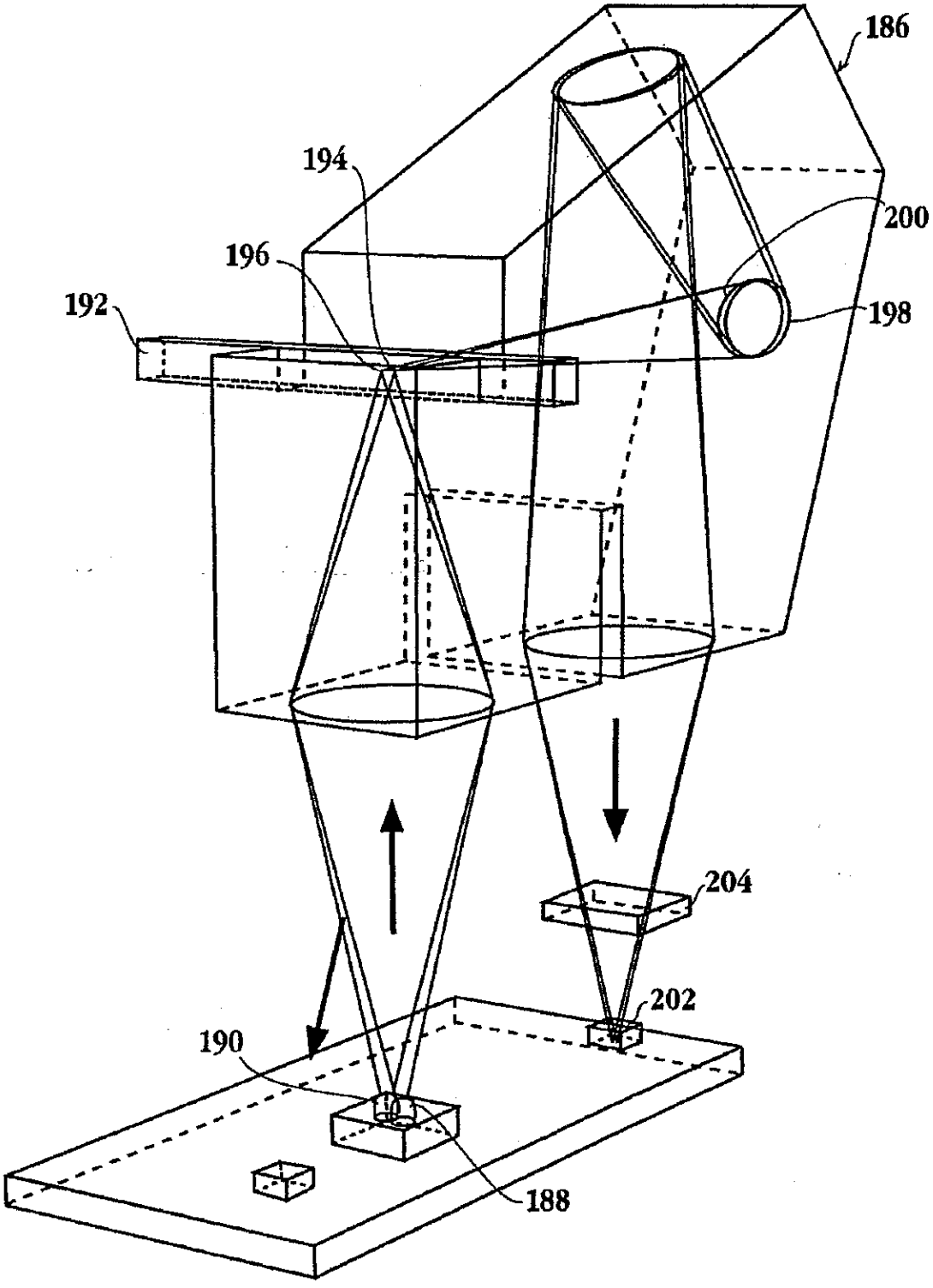



Fig. 9

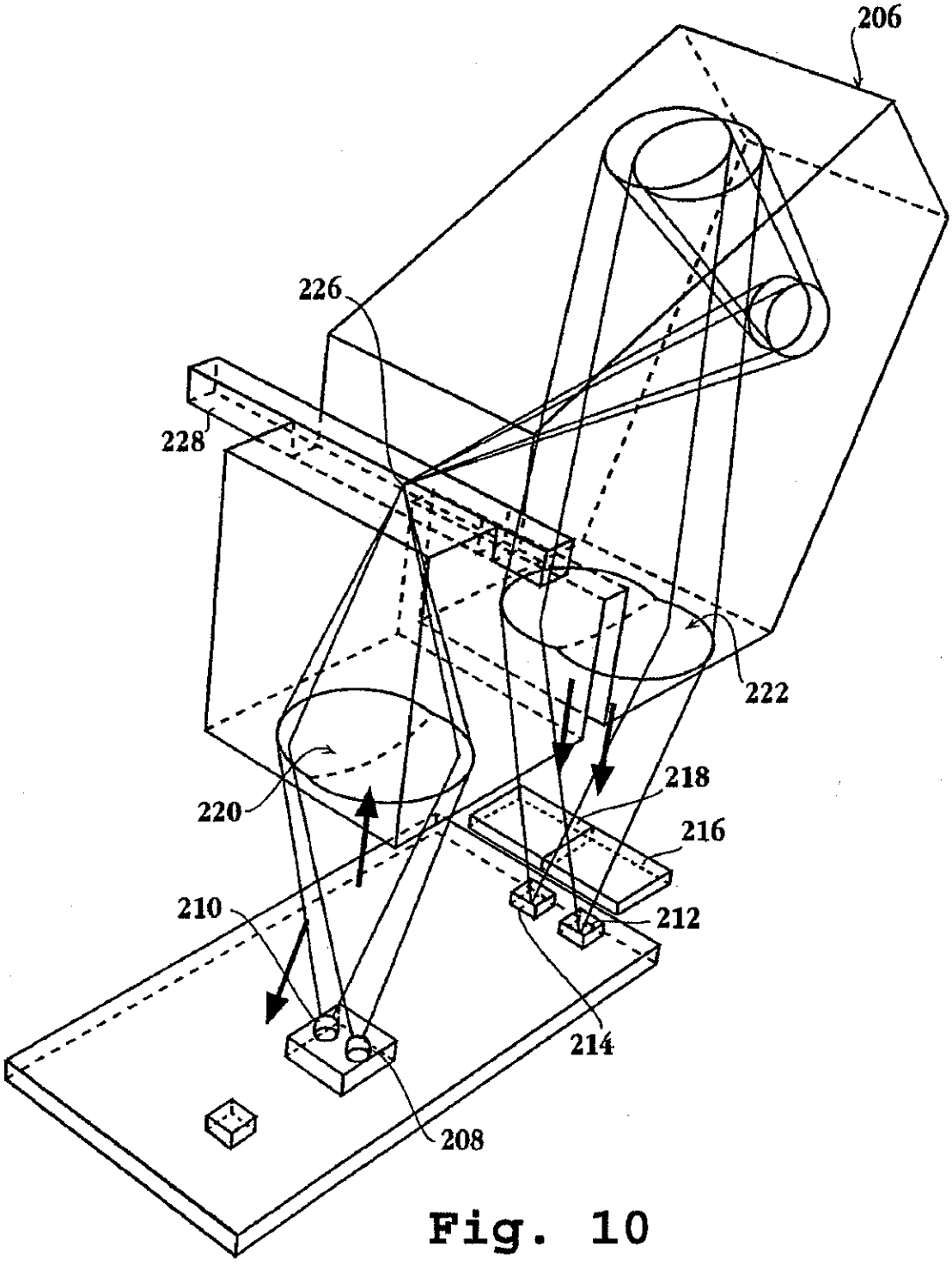



Fig. 10

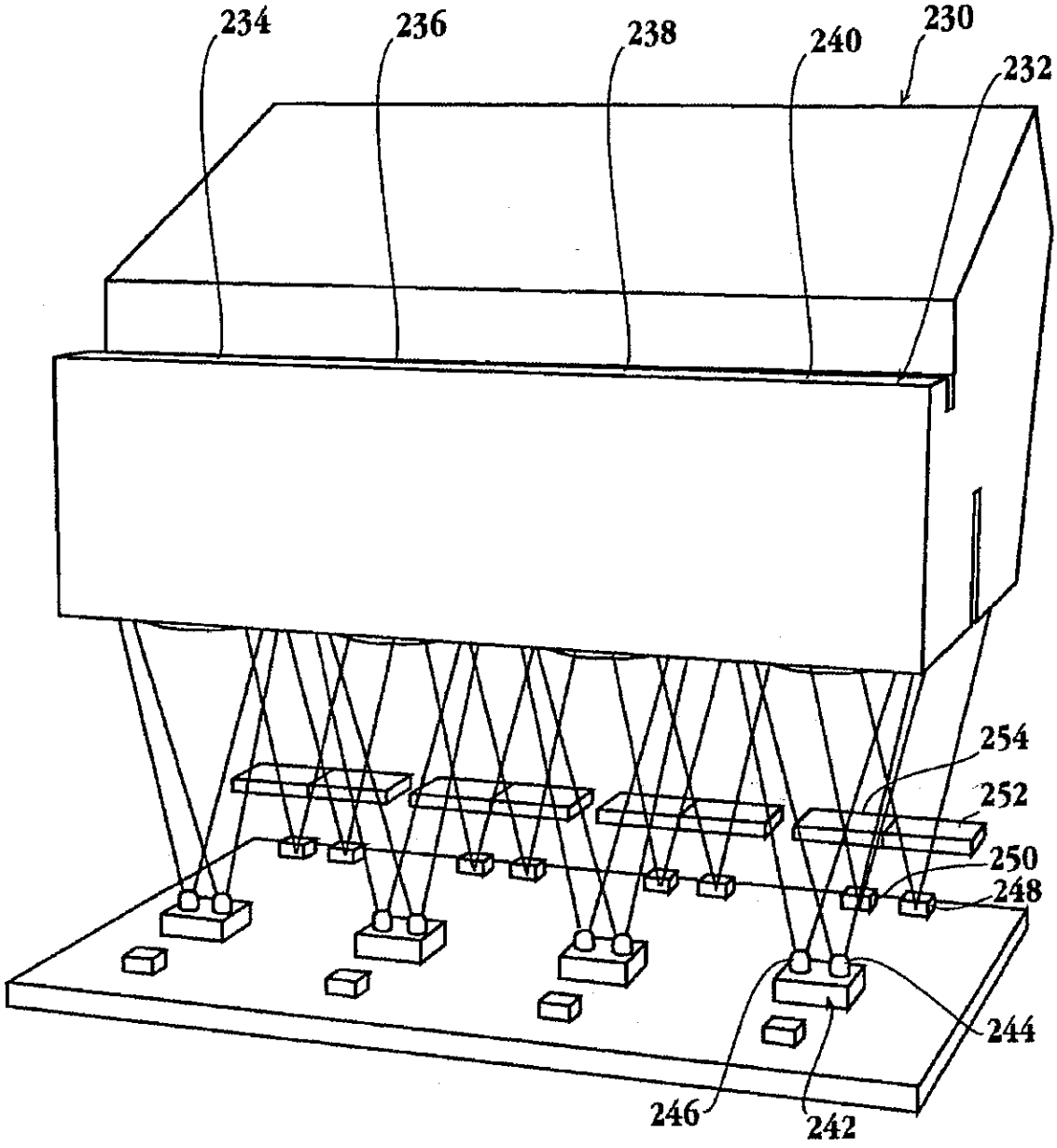



Fig. 11

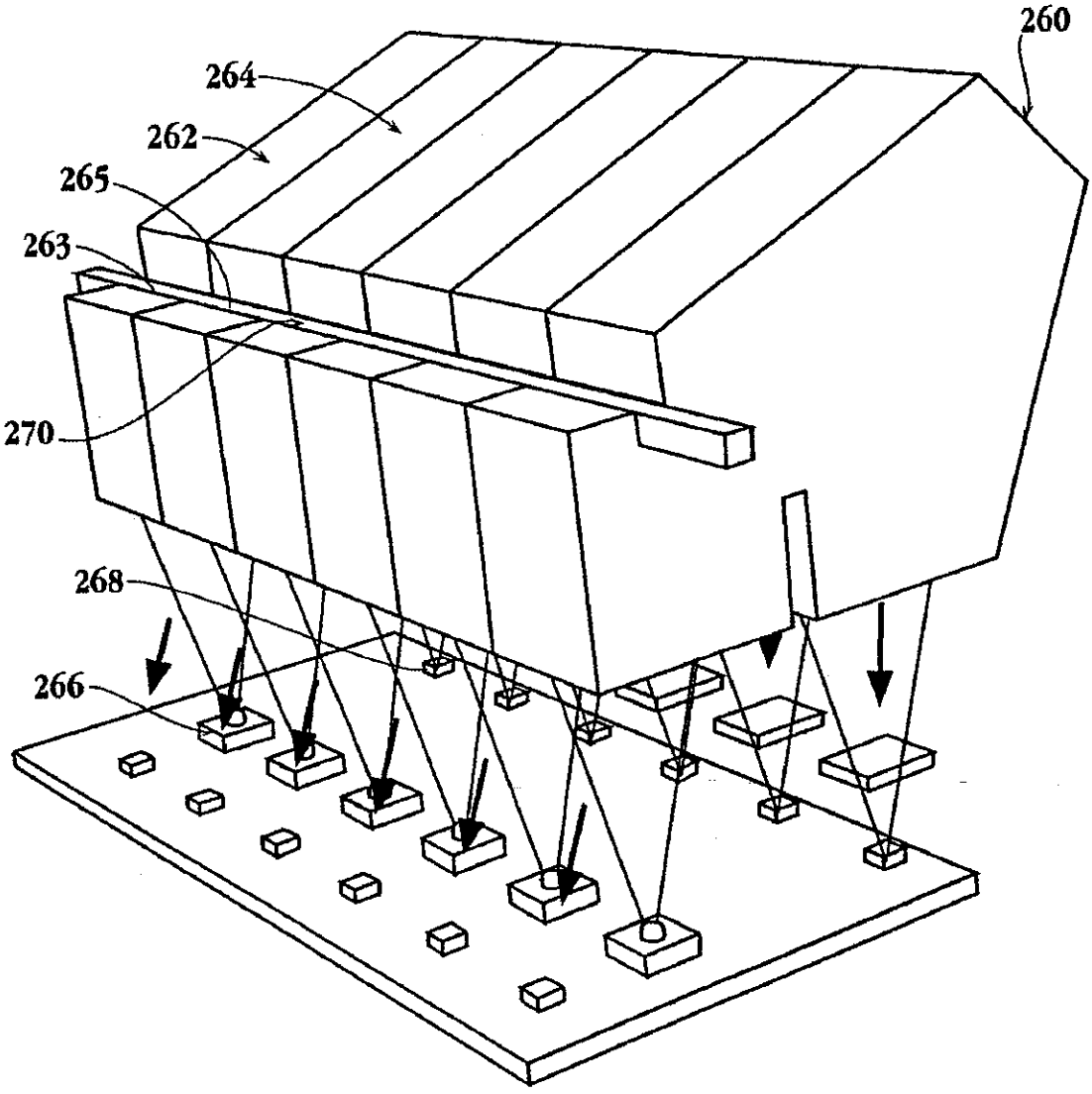



Fig. 12