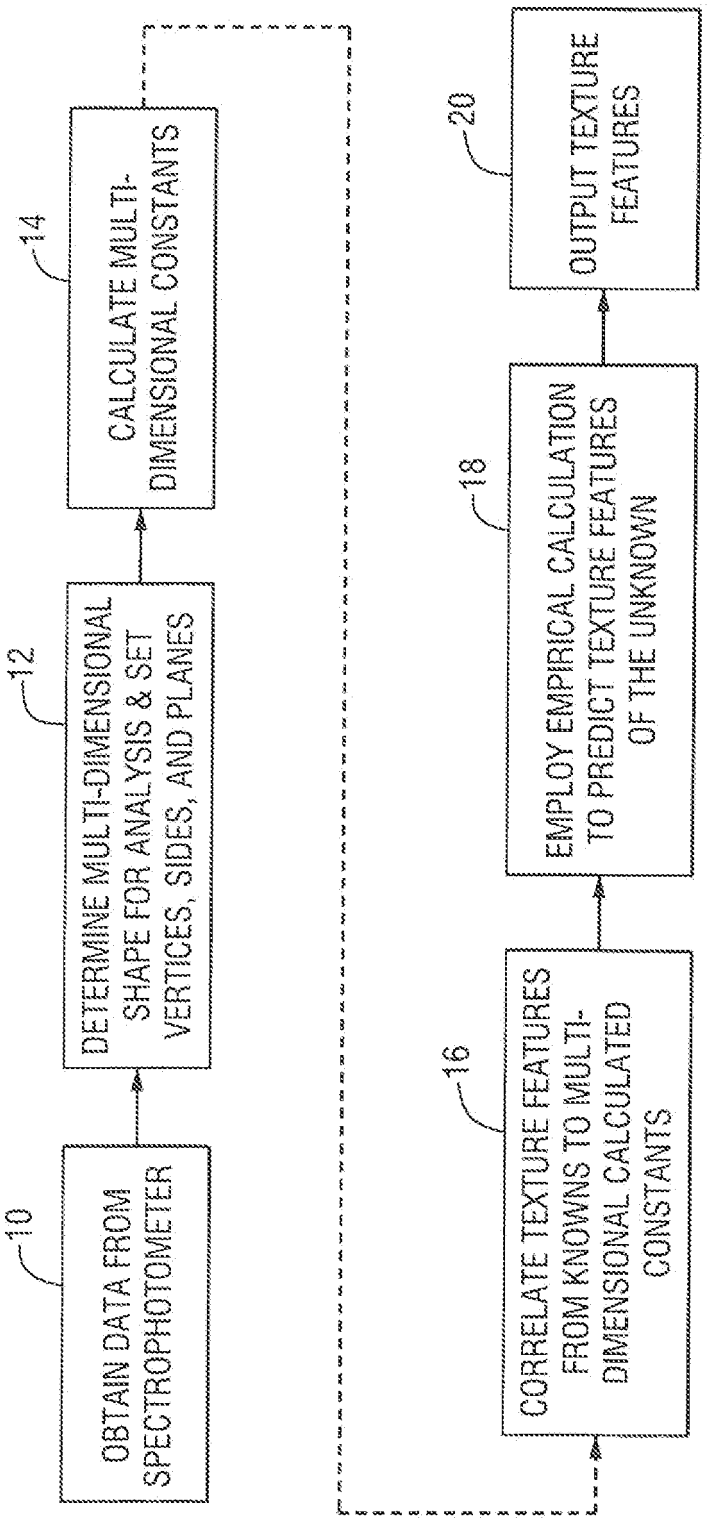

10
OBTAIN DATA FROM SPECTROPHOTOMETER
12
DETERMINE MULTI-DIMENSIONAL SHAPE FOR ANALYSIS & SET VERTICES, SIDES, AND PLANES
14
CALCULATE MULTI-DIMENSIONAL CONSTANTS
16
CORRELATE TEXTURE FEATURES FROM KNOWNS TO MULTI-DIMENSIONAL CALCULATED CONSTANTS
18
EMPLOY EMPIRICAL CALCULATION TO PREDICT TEXTURE FEATURES OF THE UNKNOWN
20
OUTPUT TEXTURE FEATURES

FIG. 1

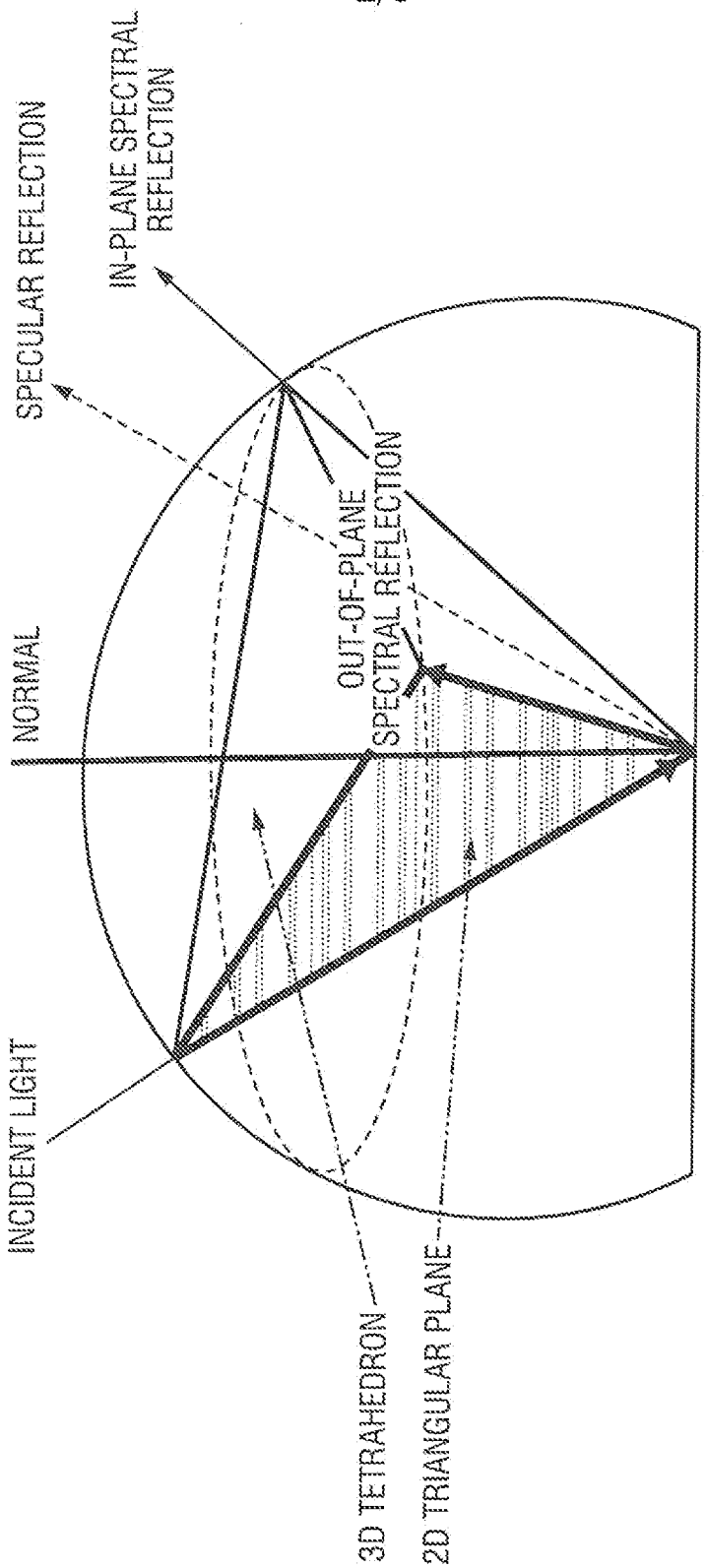

SPECULAR REFLECTION
IN-PLANE SPECTRAL REFLECTION
NORMAL
OUT-OF-PLANE SPECTRAL REFLECTION
INCIDENT LIGHT
3D TETRAHEDRON
2D TRIANGULAR PLANE

FIG. 2

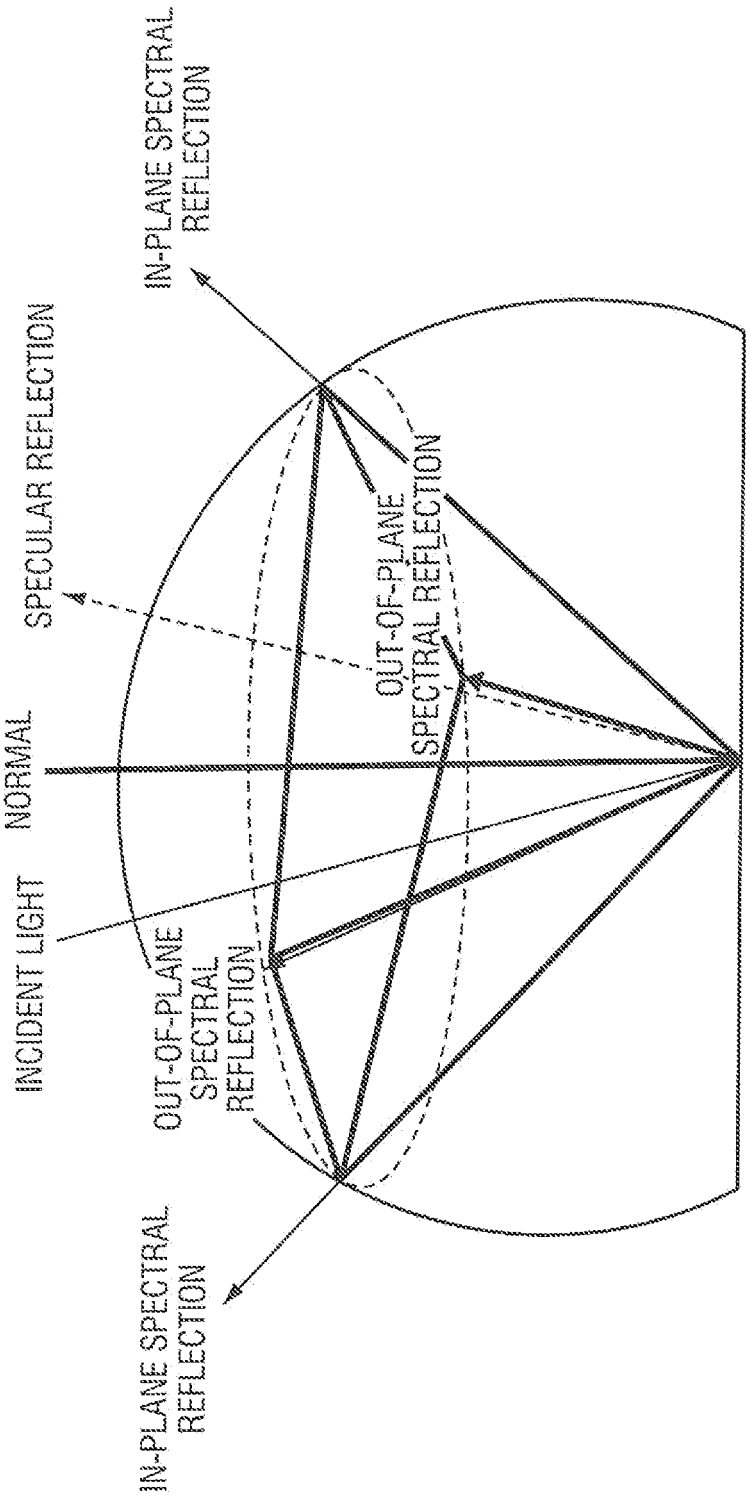

IN-PLANE SPECTRAL REFLECTION
SPECULAR REFLECTION
NORMAL
INCIDENT LIGHT
OUT-OF-PLANE SPECTRAL REFLECTION
OUT-OF-PLANE SPECTRAL REFLECTION
IN-PLANE SPECTRAL REFLECTION

FIG. 3

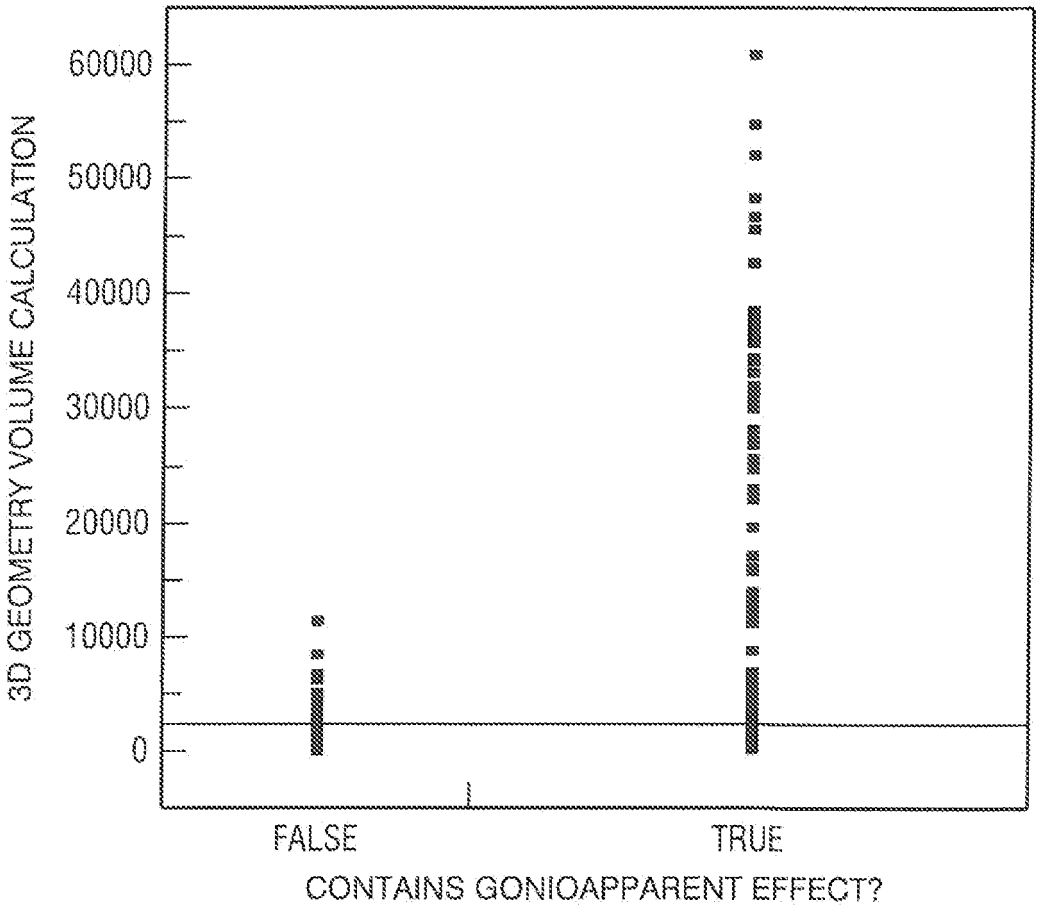

3D GEOMETRY VOLUME CALCULATION
60000
50000
40000
30000
20000
10000
0
FALSE
TRUE
CONTAINS GONIOAPPARENT EFFECT?

FIG. 4

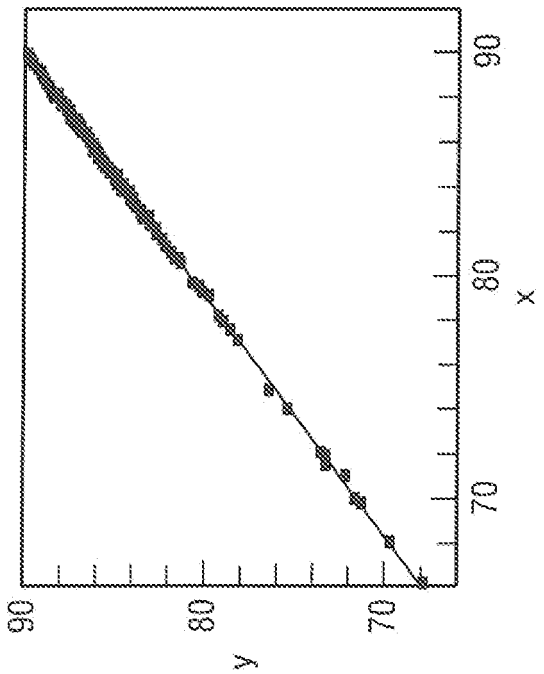

90
80
70
y
70
80
90
x
Linear Fit
Linear Fit
y=7.6382805 + 0.9151718*x
Summary of Fit
RSquare 0.999229

FIG. 5B

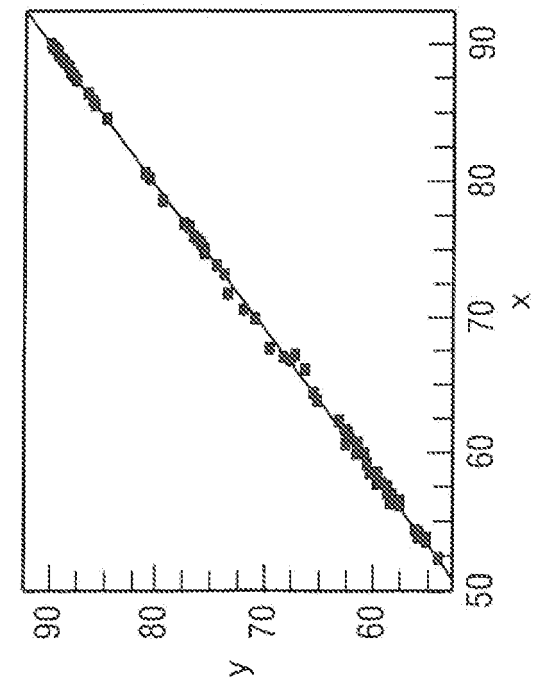

90
80
70
60
y
50
60
70
80
90
x
Linear Fit
Linear Fit
y=4.3565801+ 0.9518398*x
Summary of Fit
RSquare 0.999685

FIG. 5A

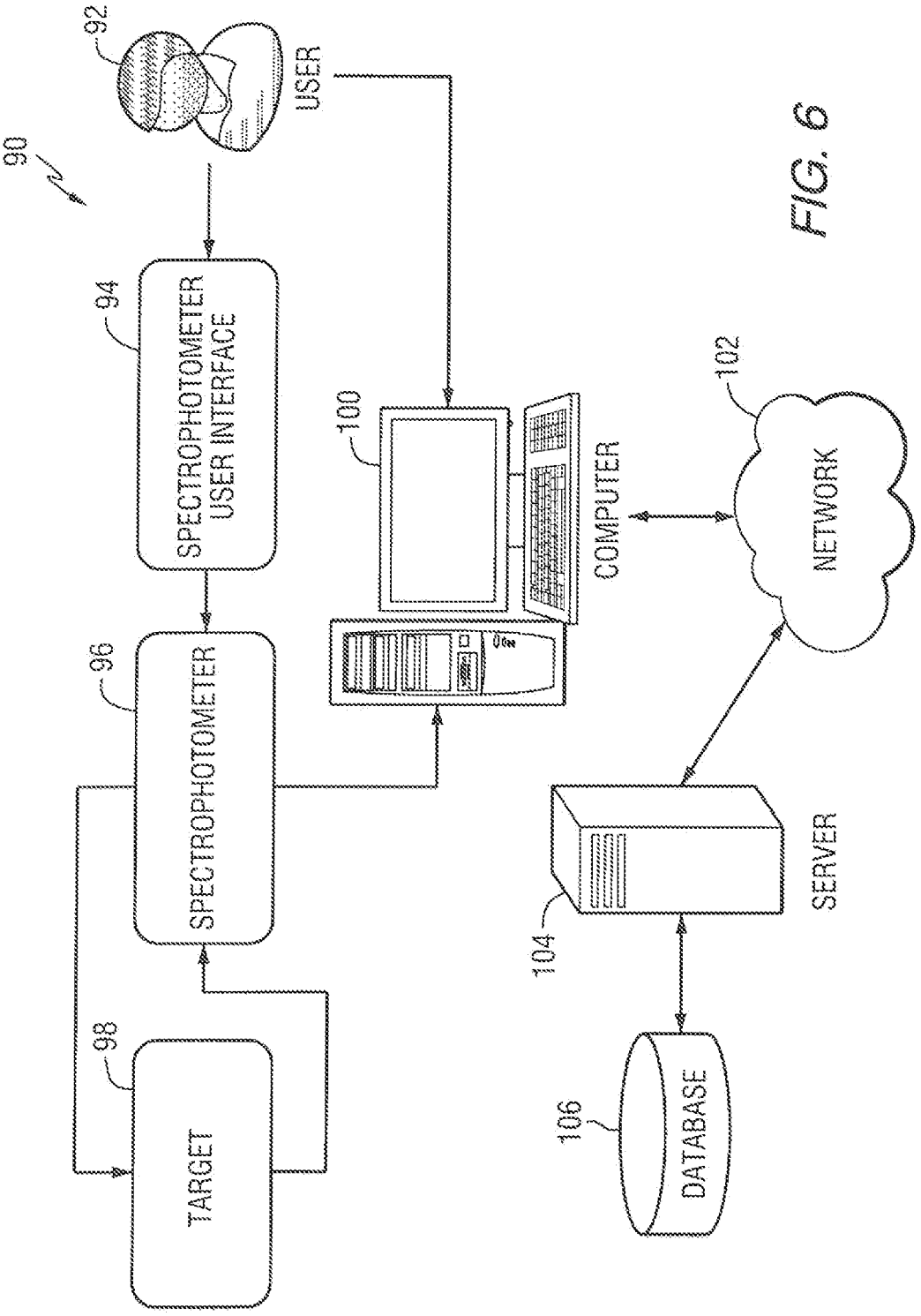

90
92
USER
94
SPECTROPHOTOMETER USER INTERFACE
96
SPECTROPHOTOMETER
98
TARGET
100
COMPUTER
102
NETWORK
104
SERVER
106
DATABASE

FIG. 6