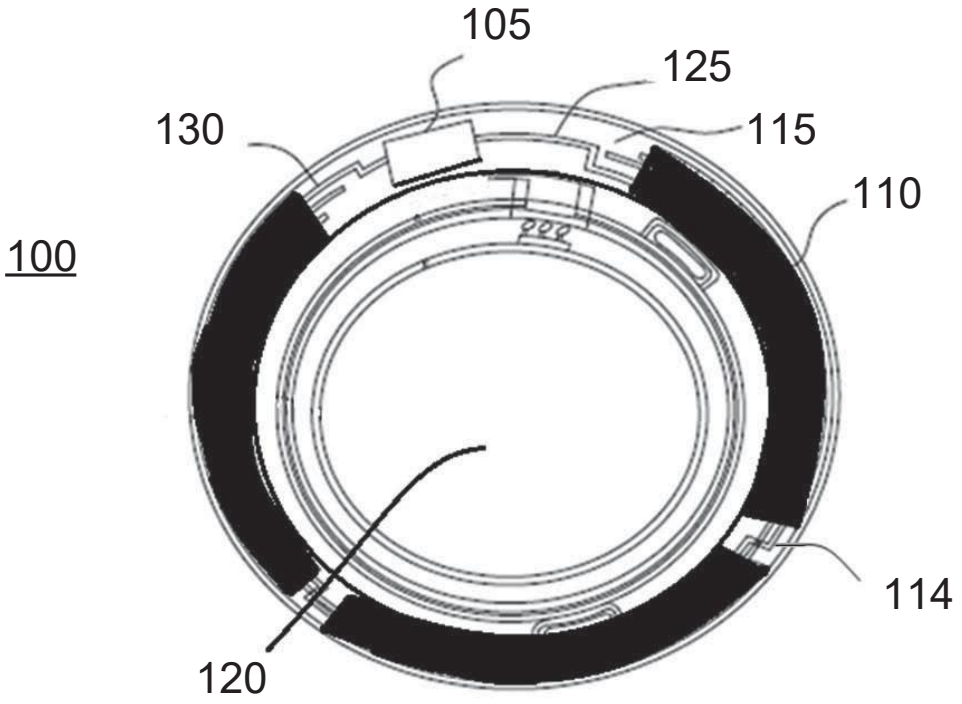
FIG. 1A



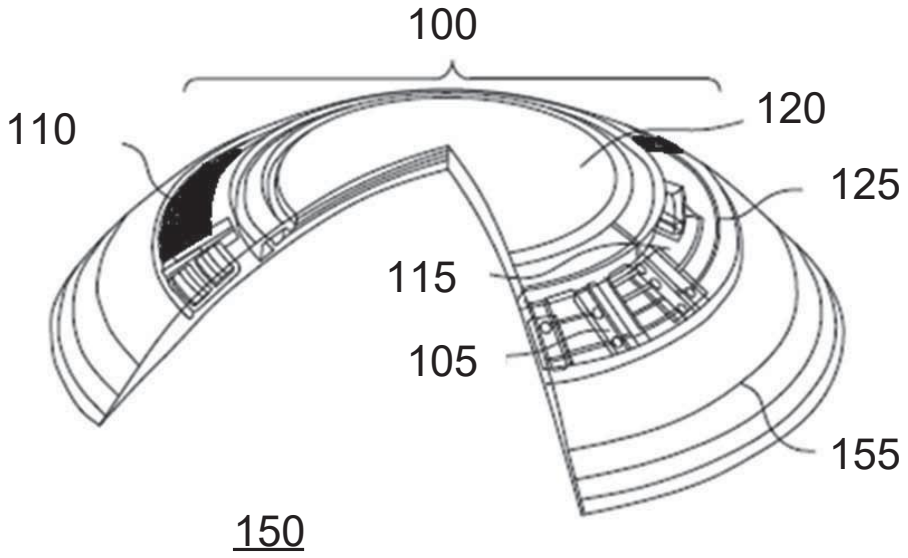


FIG. 1B

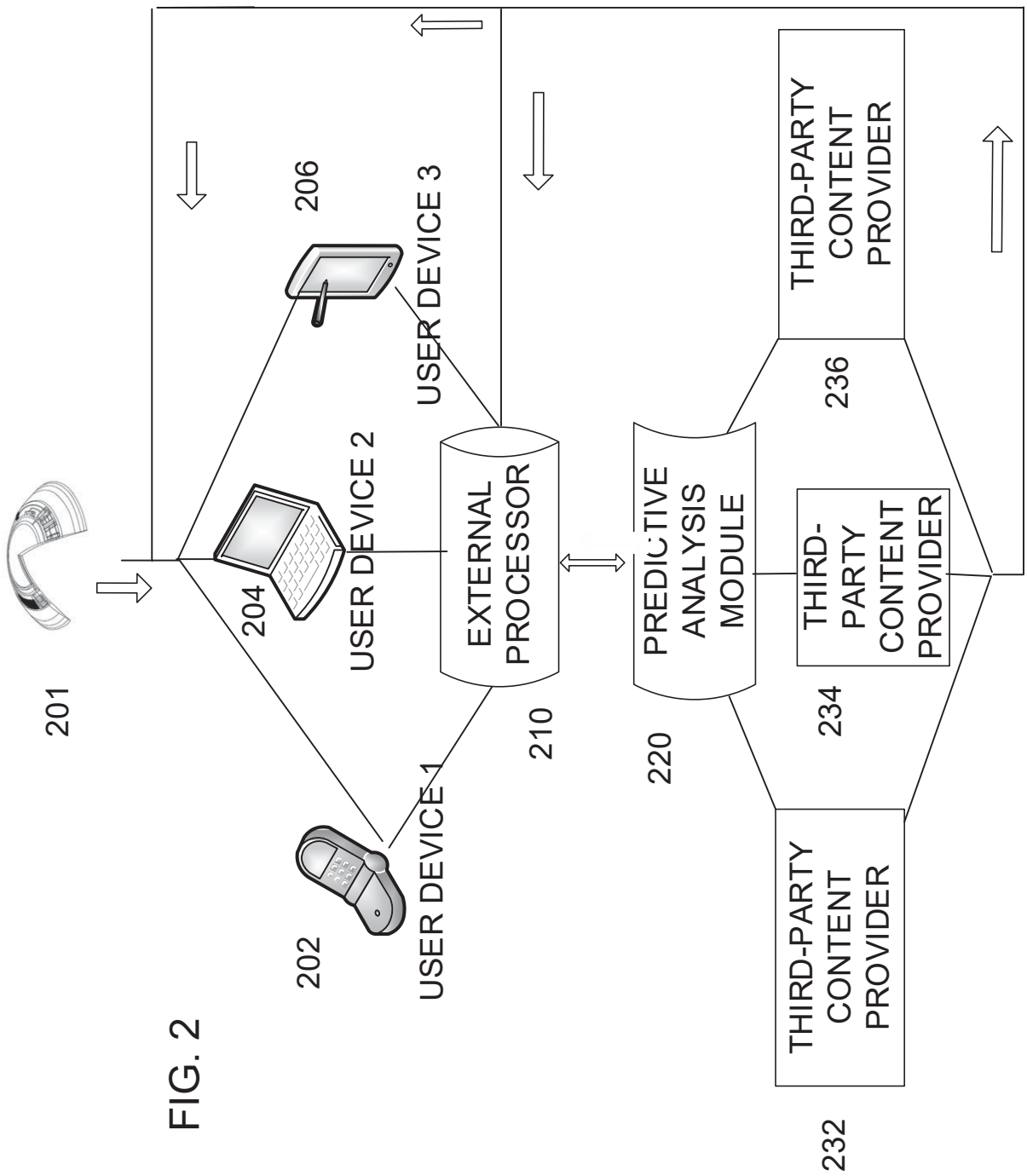

201
202
USER DEVICE 1
204
USER DEVICE 2
206
USER DEVICE 3
210
EXTERNAL PROCESSOR
220
PREDICTIVE ANALYSIS MODULE
232
THIRD-PARTY CONTENT PROVIDER
234
THIRD-PARTY CONTENT PROVIDER
236
THIRD-PARTY CONTENT PROVIDER

FIG. 2

FIG. 3

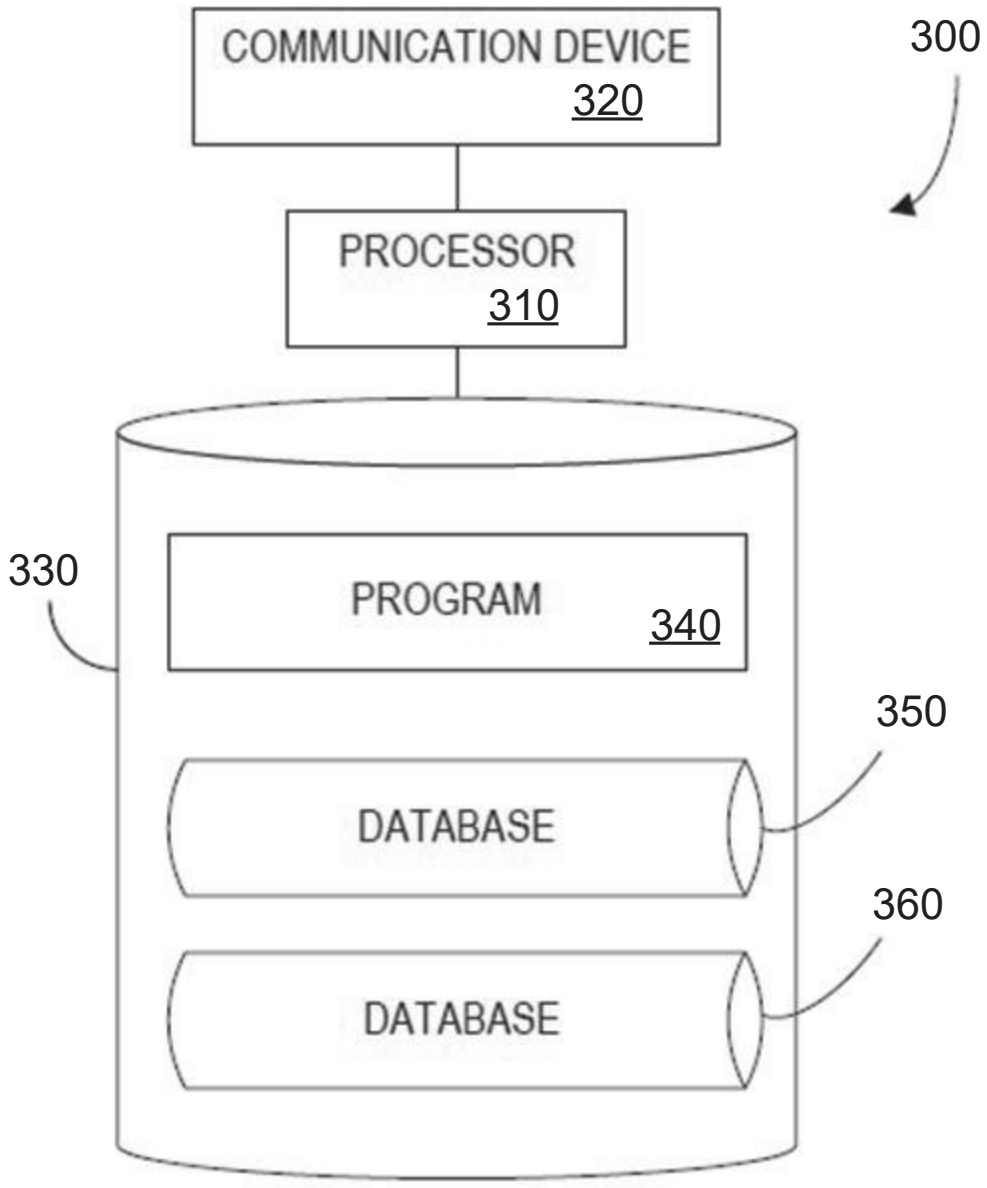

COMMUNICATION DEVICE
320
300
PROCESSOR
310
330
PROGRAM
340
350
DATABASE
360
DATABASE

FIG. 4

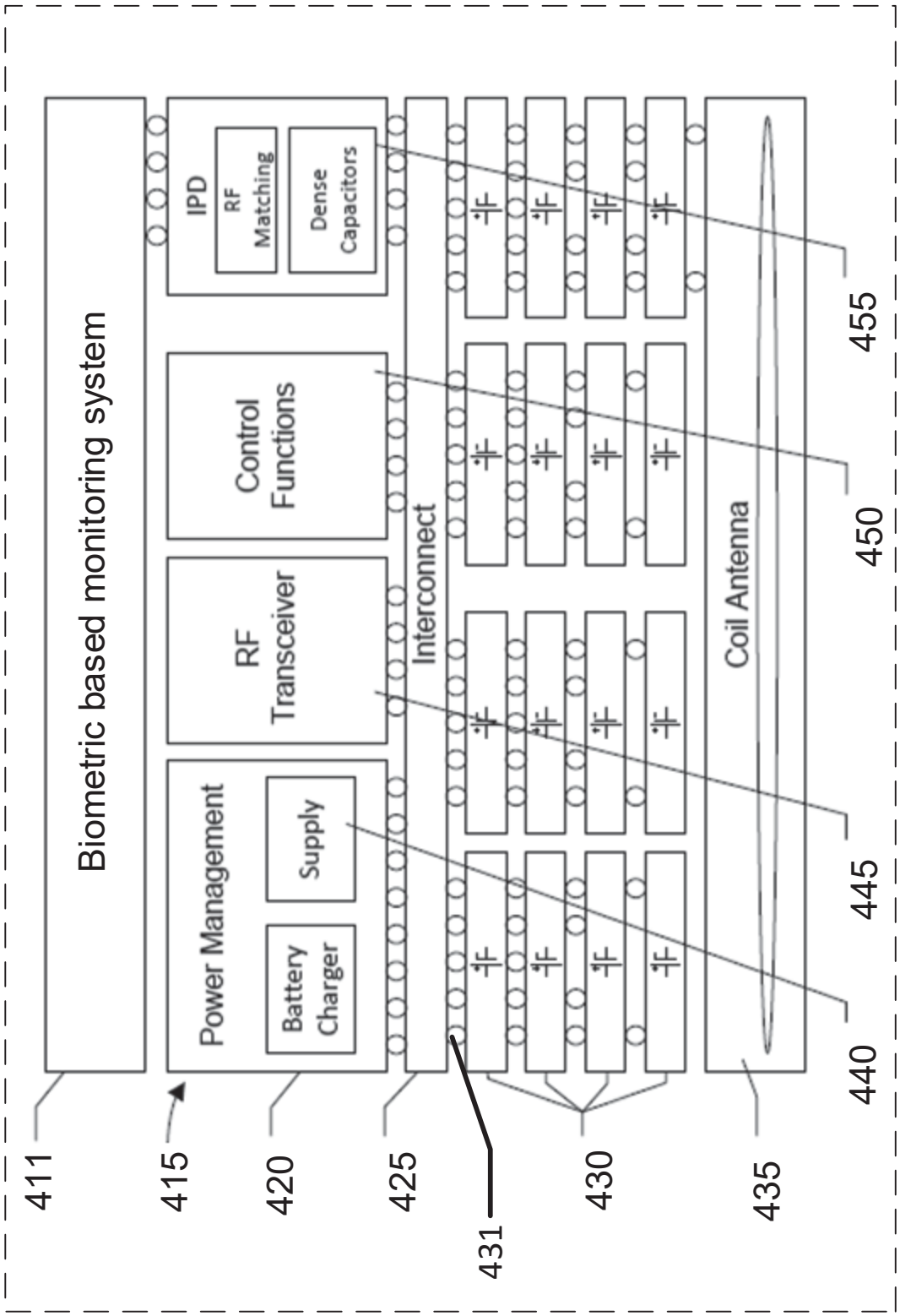

410
Biometric based monitoring system
IPD
RF Matching
Dense Capacitors
Control Functions
RF Transceiver
Power Management
Supply
Battery Charger
Interconnect
Coil Antenna
411
415
420
425
431
430
435
440
445
450
455

FIG. 5

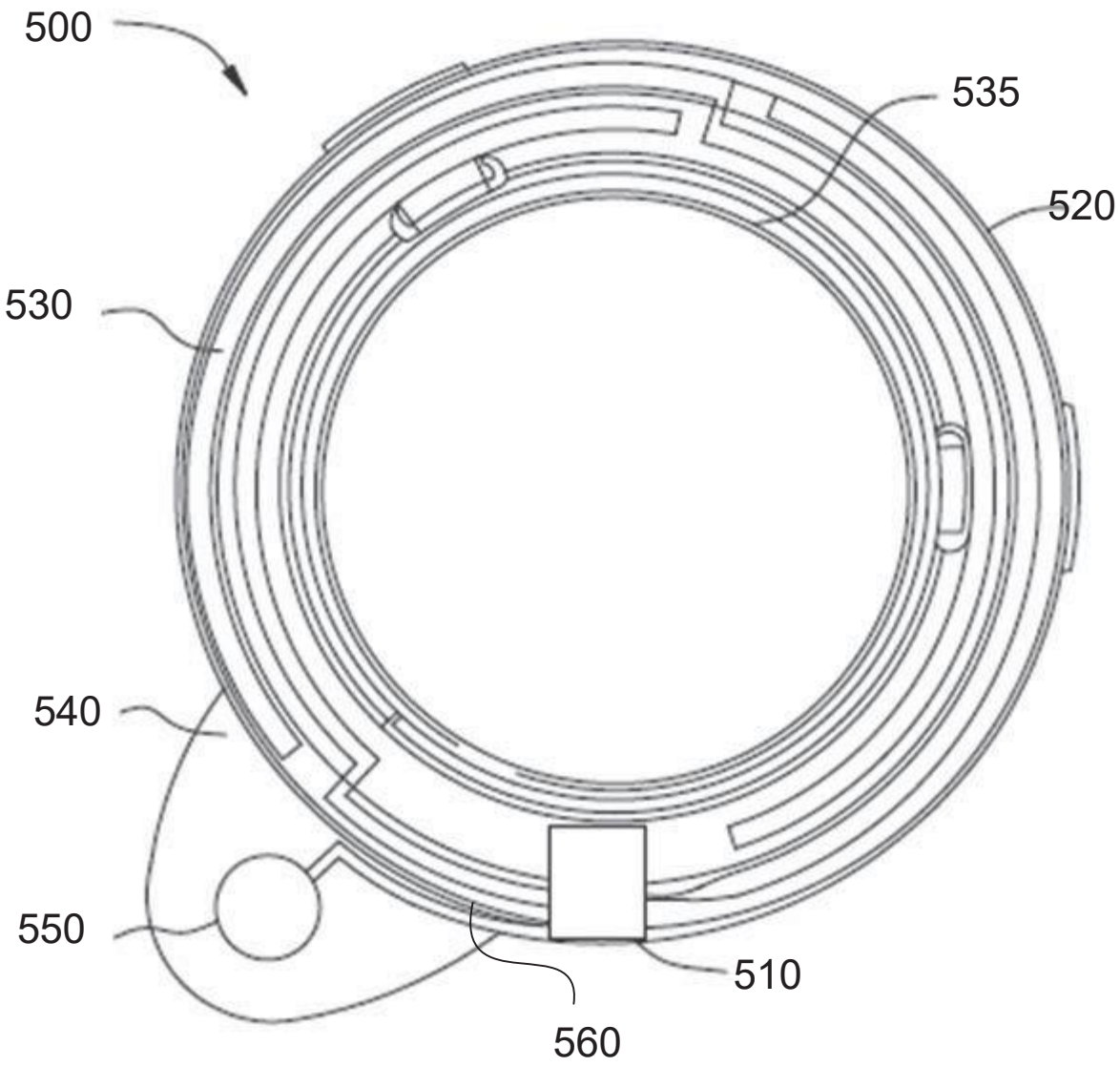
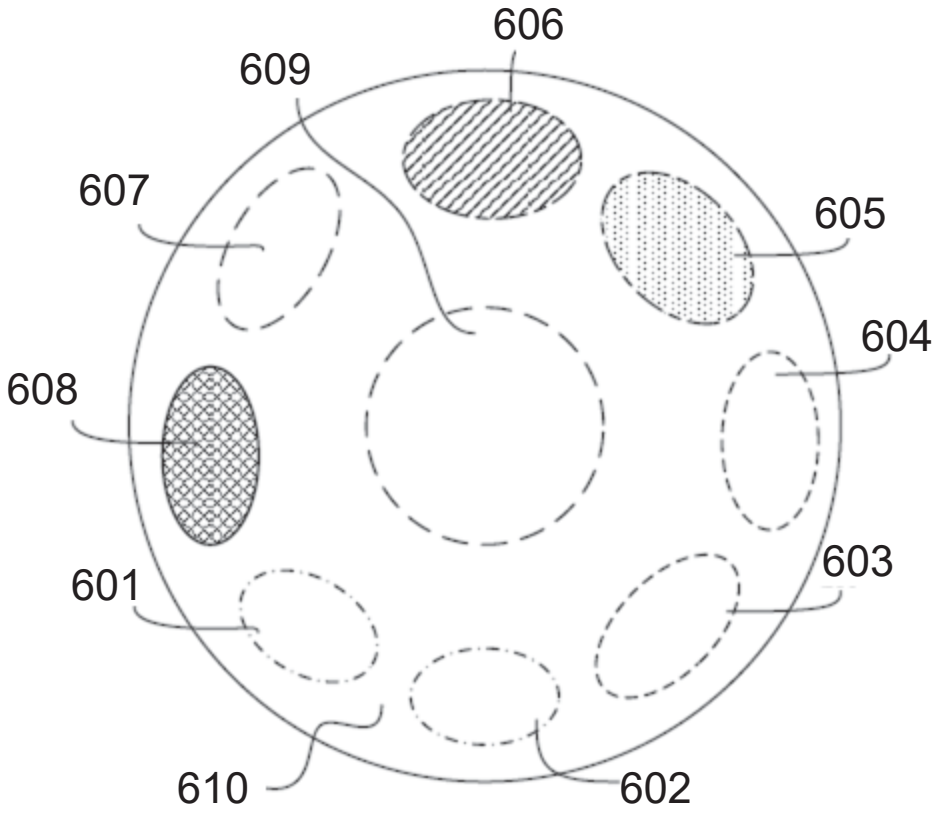
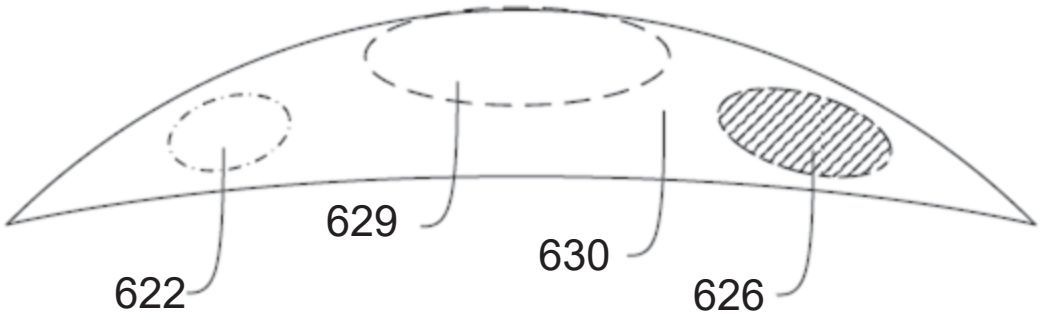


FIG. 6A



600

FIG. 6B



620

Fig. 7A

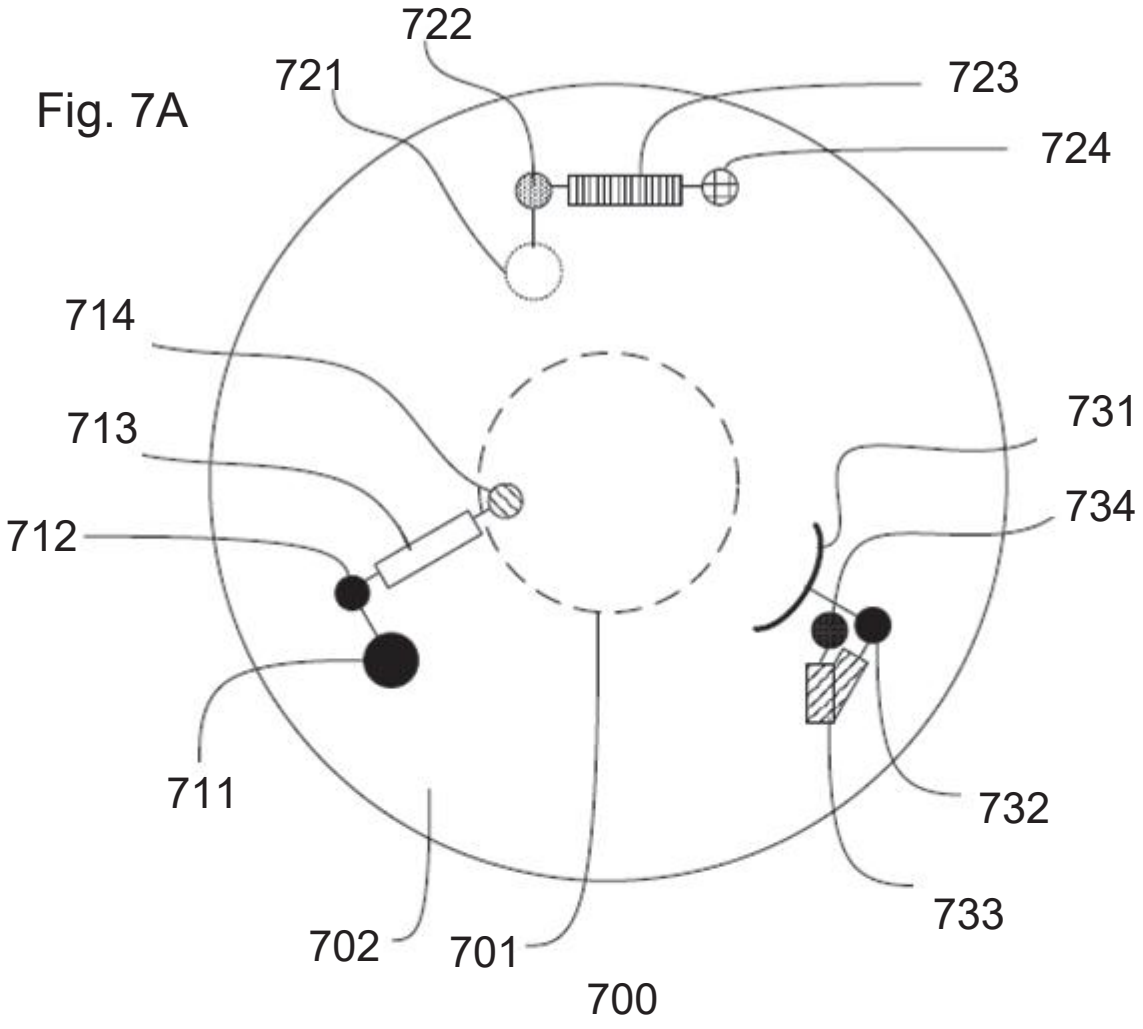

722
721
723
724
714
713
731
712
734
711
732
733
702
701
700

Fig. 7B

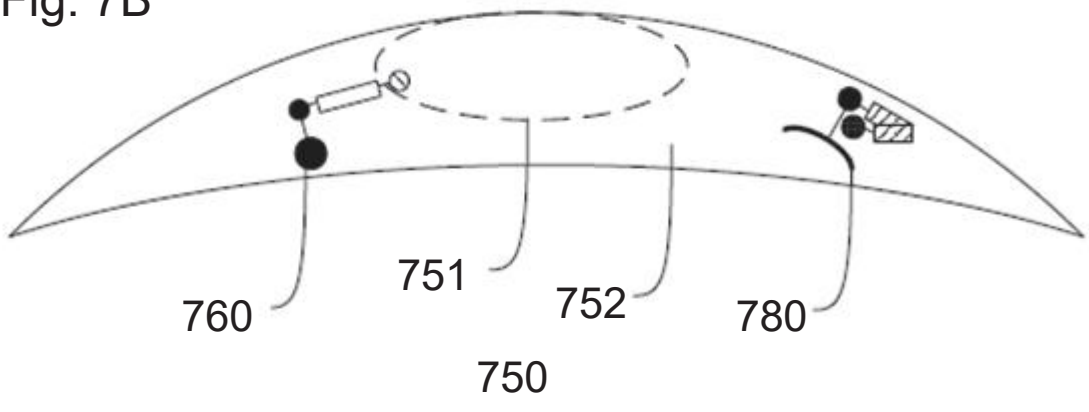
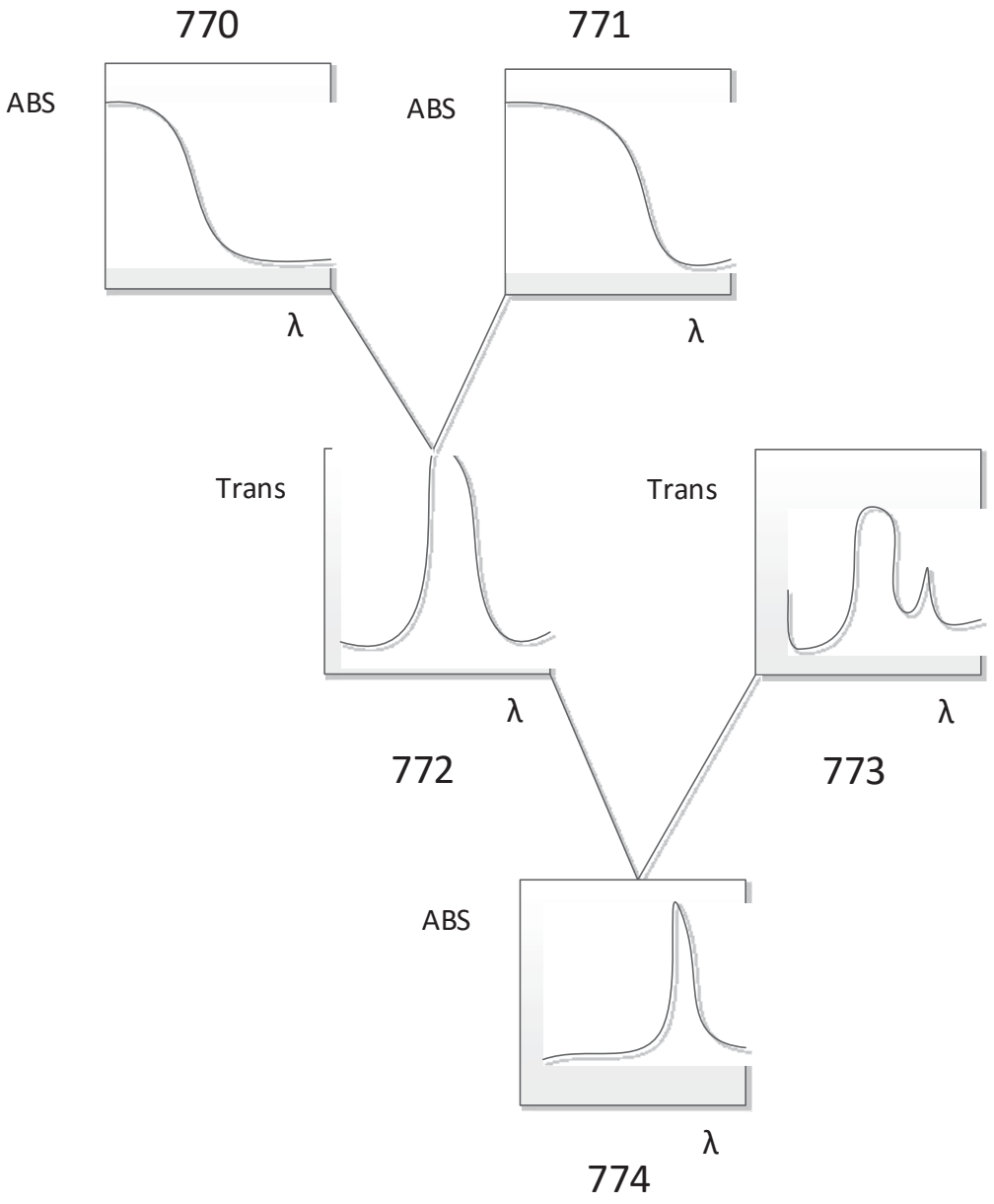

760
751
752
780
750

Fig. 7C



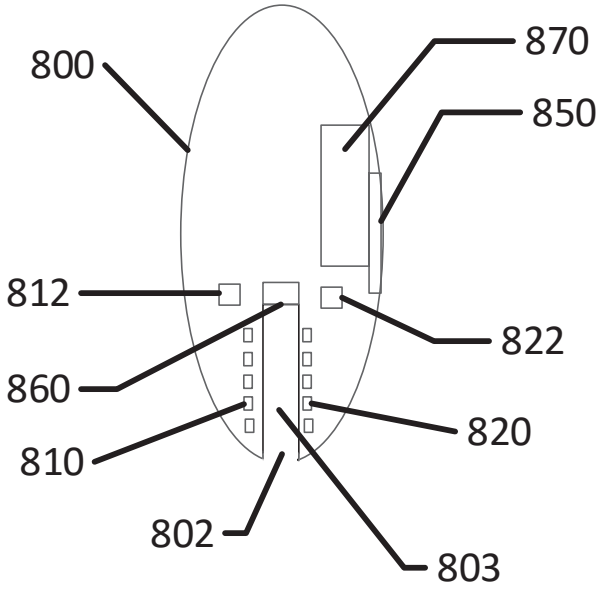


FIG. 8A

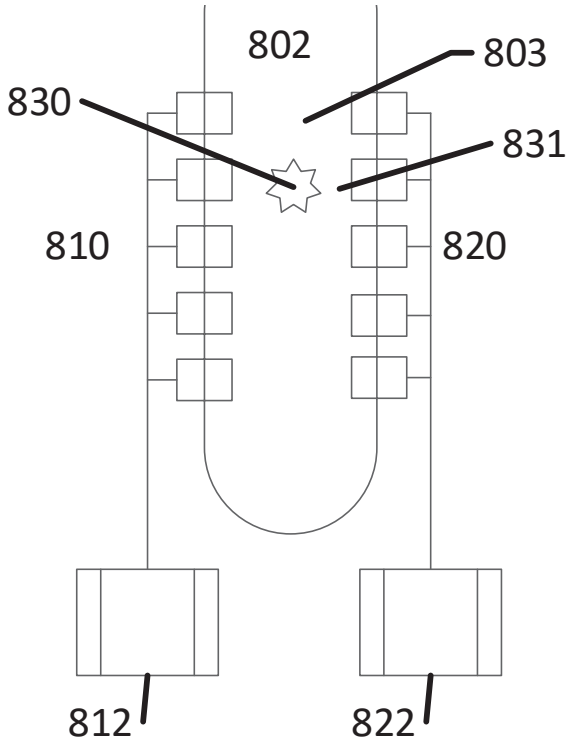


FIG. 8B

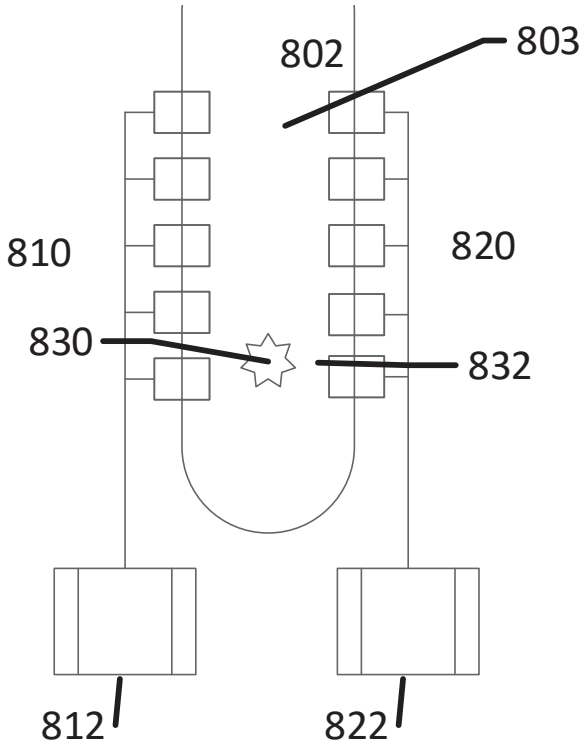


FIG. 8C



FIG. 9A

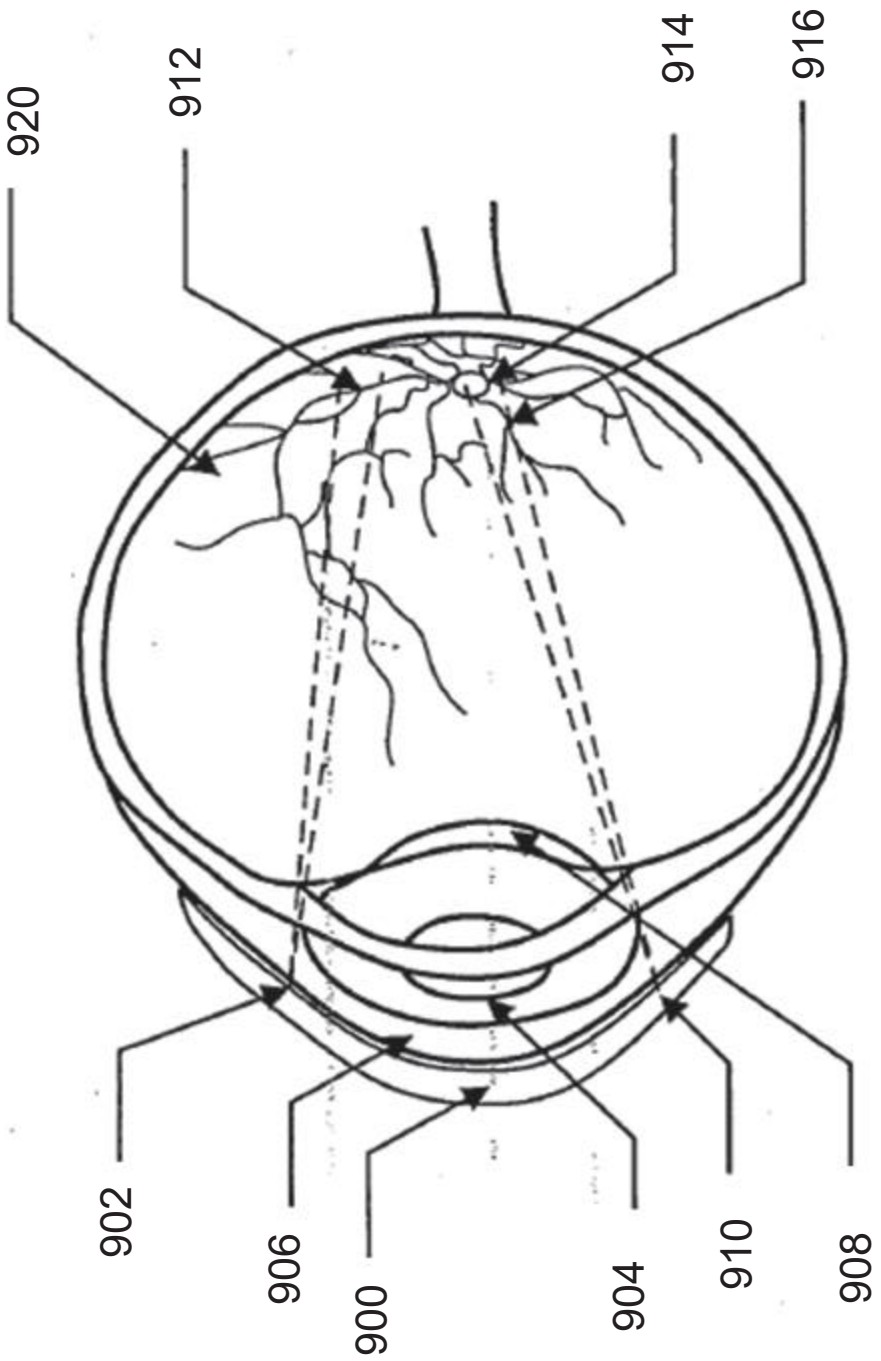
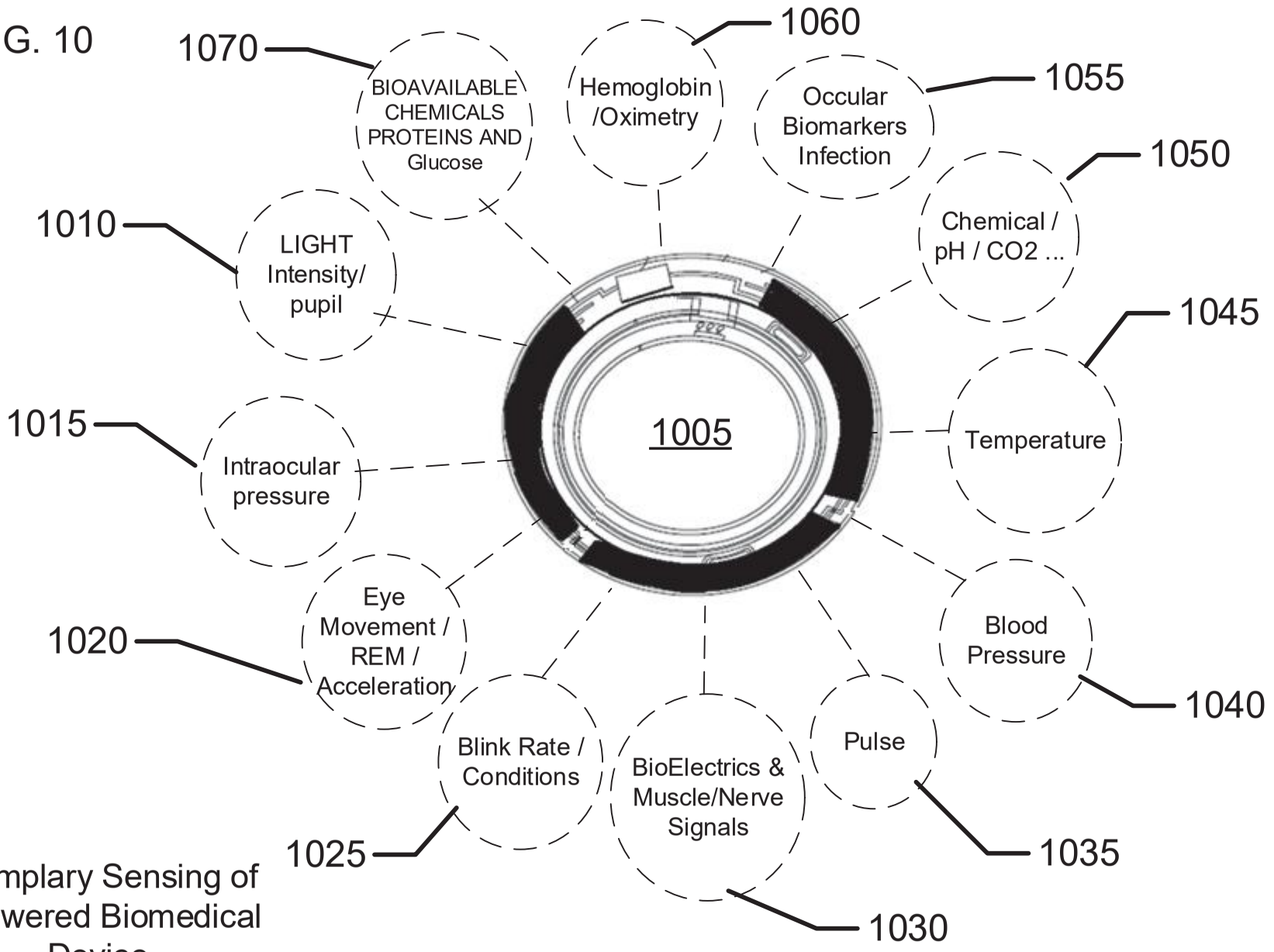


FIG. 9B

FIG. 10



Exemplary Sensing of a Powered Biomedical Device

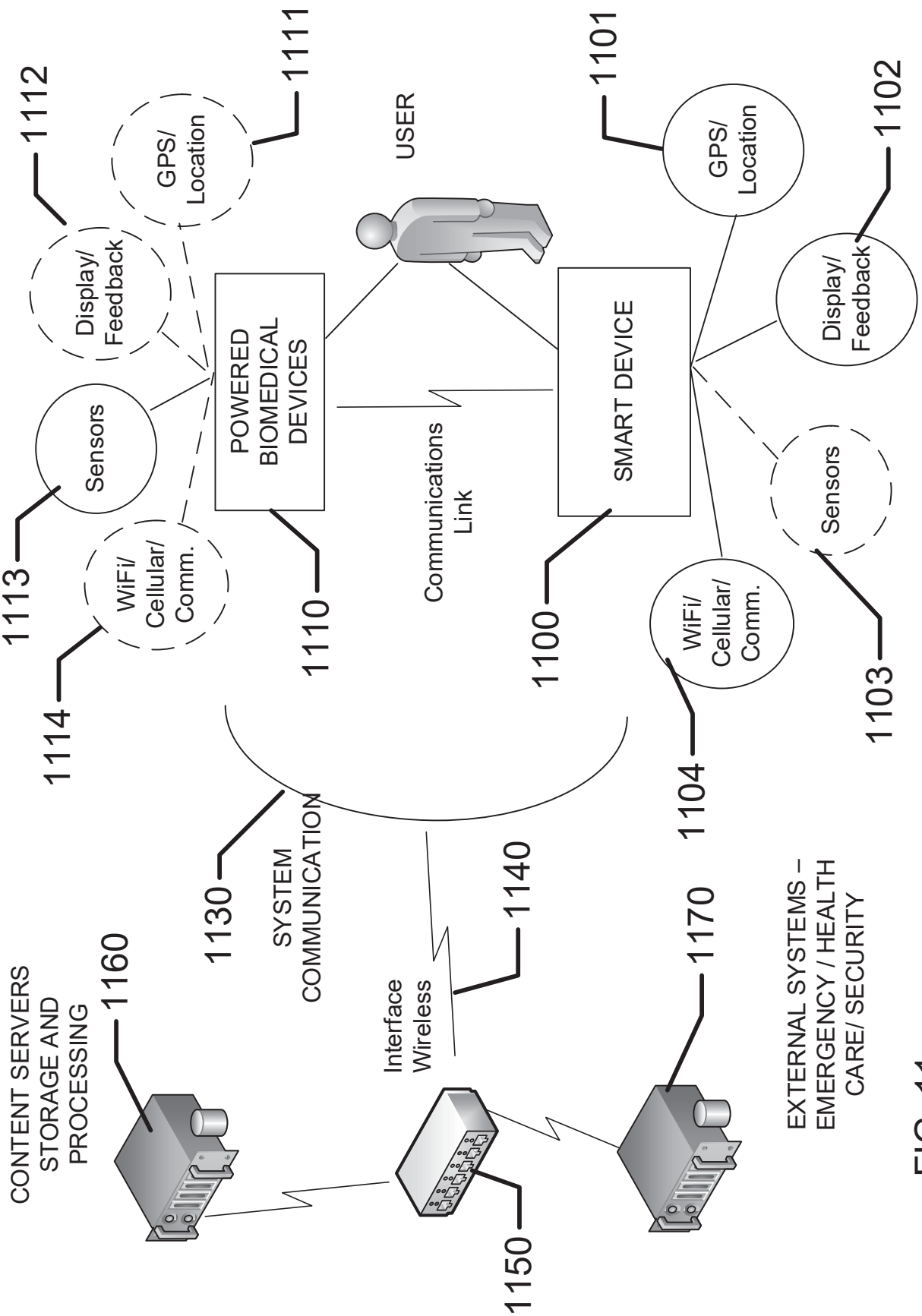

1112
1111
1101
USER
GPS/
Location
GPS/
Location
Display/
Feedback
Display/
Feedback
Sensors
POWERED
BIOMEDICAL
DEVICES
SMART DEVICE
Sensors
1113
1110
Communications
Link
1100
1102
WiFi/
Cellular/
Comm.
WiFi/
Cellular/
Comm.
1114
1104
1103
1130
SYSTEM
COMMUNICATION
1140
Interface
Wireless
1160
CONTENT SERVERS
STORAGE AND
PROCESSING
1170
EXTERNAL SYSTEMS –
EMERGENCY / HEALTH
CARE/ SECURITY
1150

FIG. 11

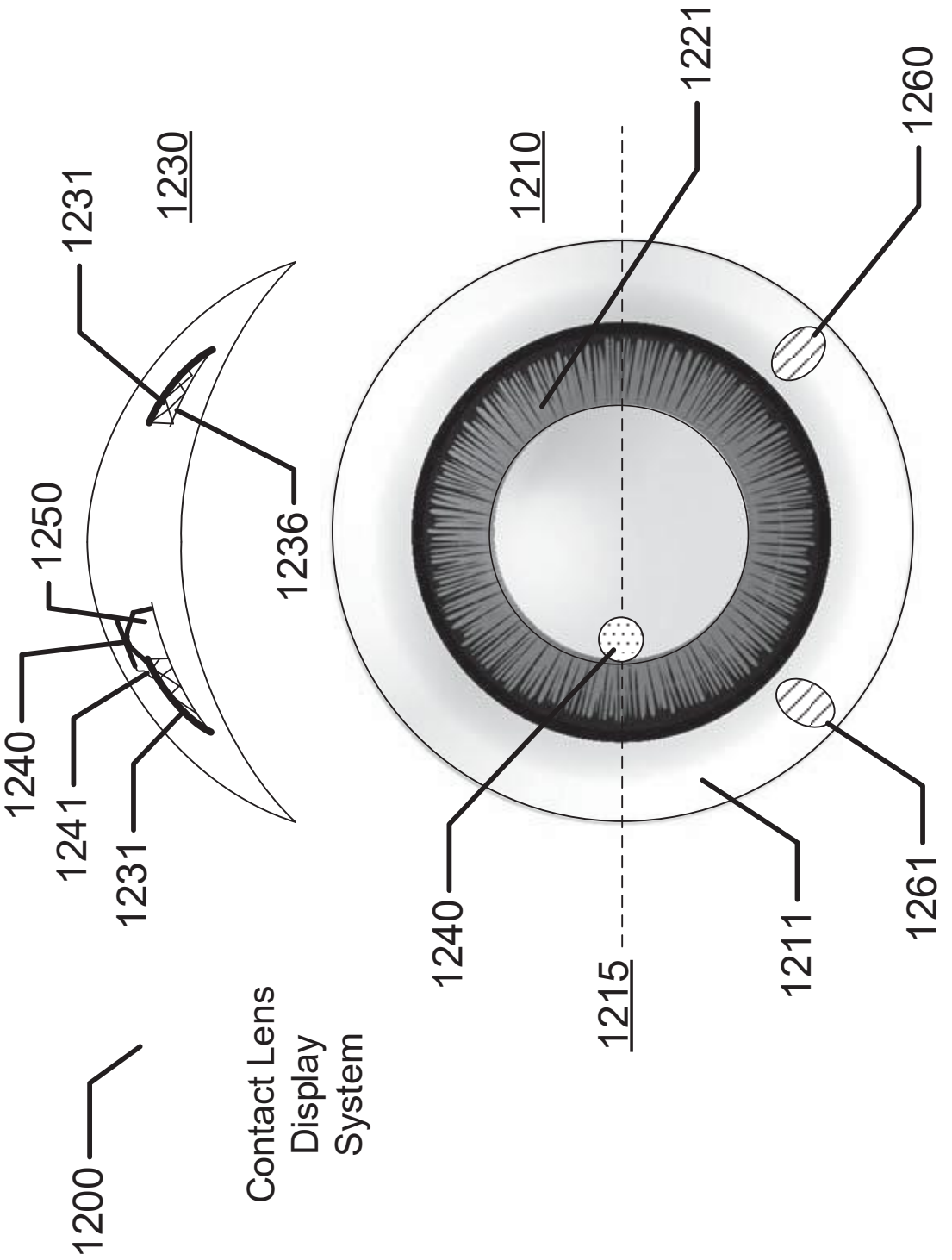

1200
Contact Lens
Display
System
1240
1241
1231
1250
1231
1230
1236
1240
1215
1210
1221
1260
1211
1261

FIG. 12

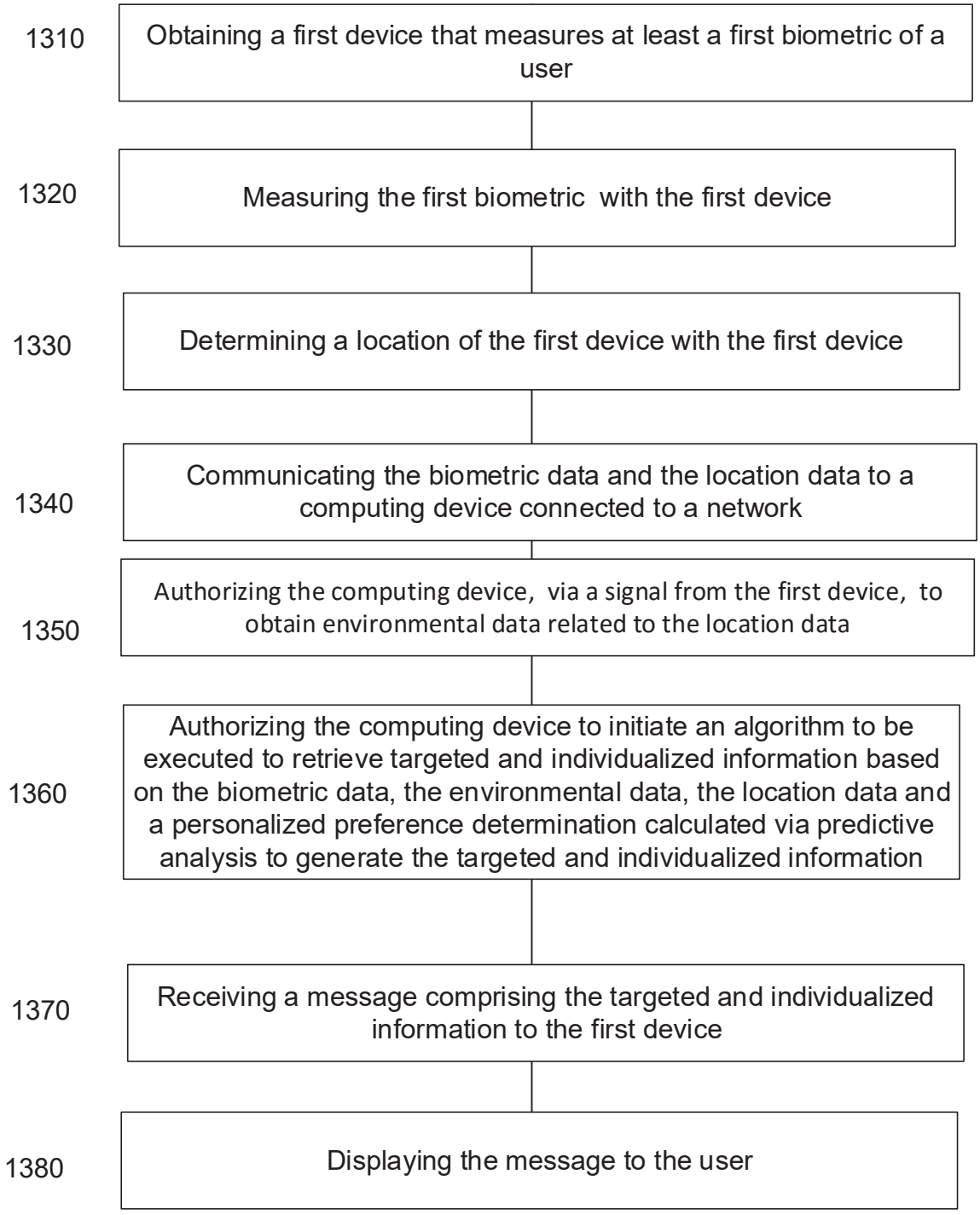

1310
Obtaining a first device that measures at least a first biometric of a user
1320
Measuring the first biometric with the first device
1330
Determining a location of the first device with the first device
1340
Communicating the biometric data and the location data to a computing device connected to a network
1350
Authorizing the computing device, via a signal from the first device, to obtain environmental data related to the location data
1360
Authorizing the computing device to initiate an algorithm to be executed to retrieve targeted and individualized information based on the biometric data, the environmental data, the location data and a personalized preference determination calculated via predictive analysis to generate the targeted and individualized information
1370
Receiving a message comprising the targeted and individualized information to the first device
1380
Displaying the message to the user

FIG. 13

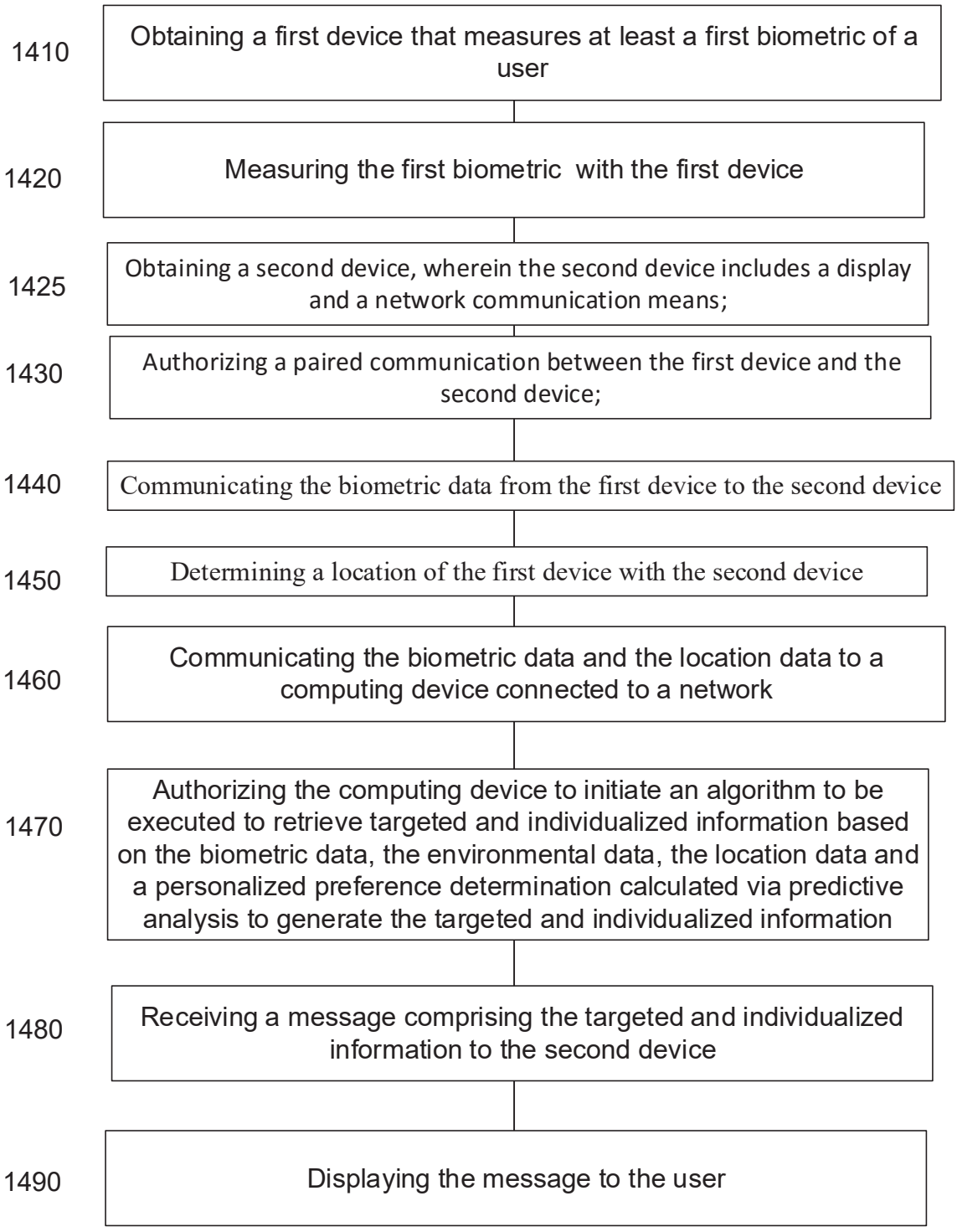

1410
Obtaining a first device that measures at least a first biometric of a user
1420
Measuring the first biometric with the first device
1425
Obtaining a second device, wherein the second device includes a display and a network communication means;
1430
Authorizing a paired communication between the first device and the second device;
1440
Communicating the biometric data from the first device to the second device
1450
Determining a location of the first device with the second device
1460
Communicating the biometric data and the location data to a computing device connected to a network
1470
Authorizing the computing device to initiate an algorithm to be executed to retrieve targeted and individualized information based on the biometric data, the environmental data, the location data and a personalized preference determination calculated via predictive analysis to generate the targeted and individualized information
1480
Receiving a message comprising the targeted and individualized information to the second device
1490
Displaying the message to the user

FIG. 14

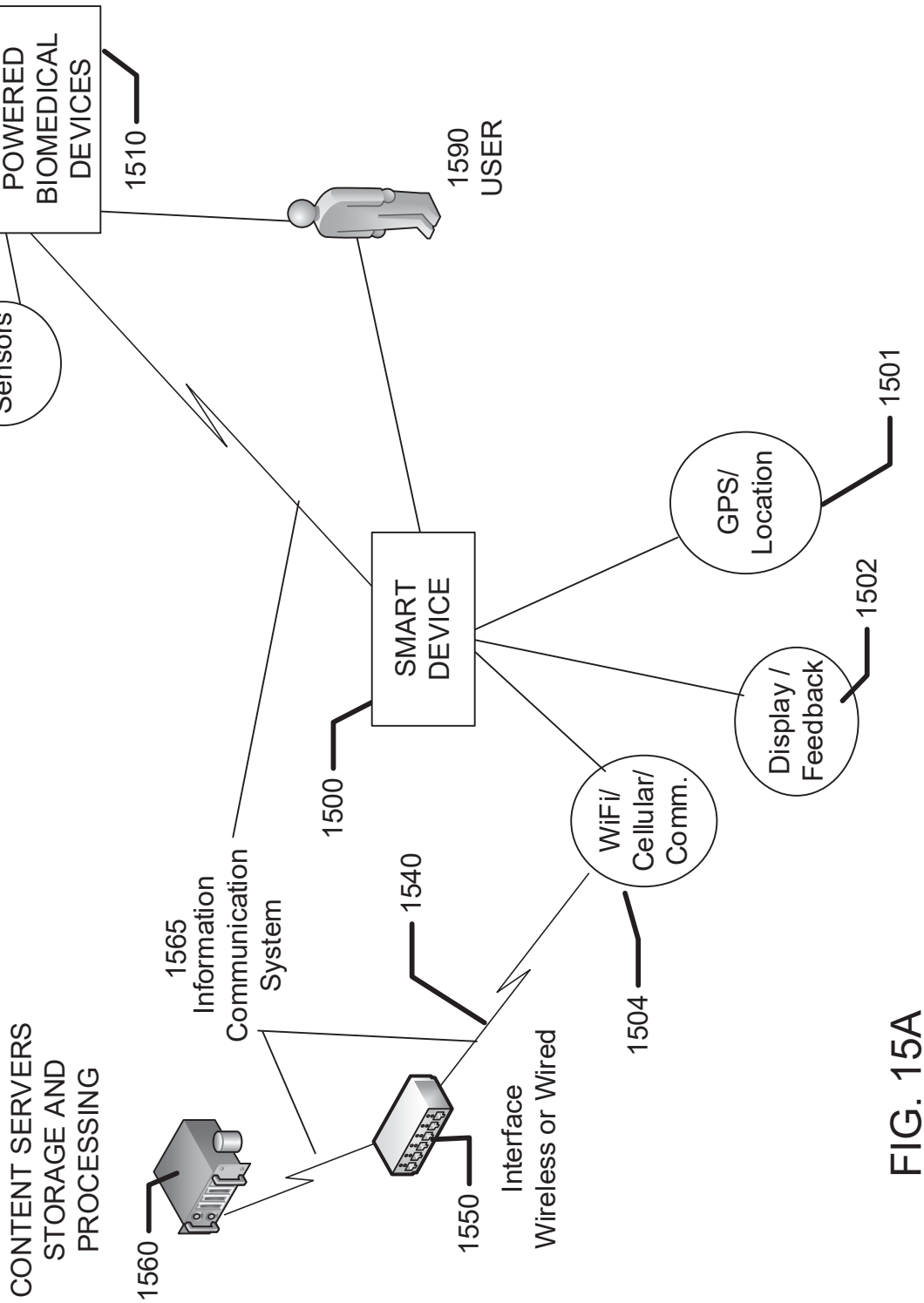

1513
POWERED BIOMEDICAL DEVICES
1510
1590 USER
Sensors
SMART DEVICE
1500
GPS/ Location
1501
Display / Feedback
1502
WiFi/ Cellular/ Comm.
1504
1565 Information Communication System
1540
Interface Wireless or Wired
1550
1560
CONTENT SERVERS STORAGE AND PROCESSING

FIG. 15A

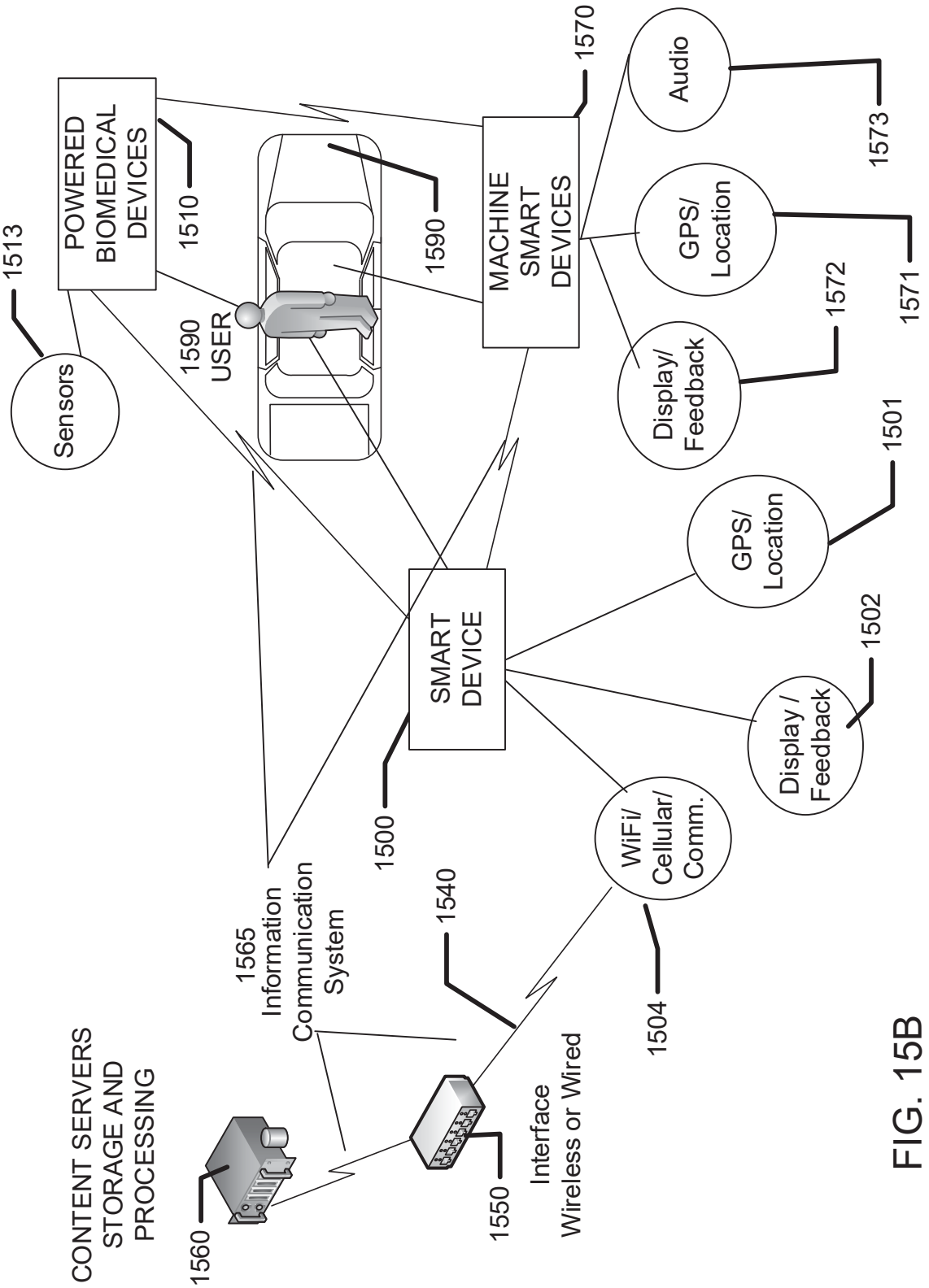

CONTENT SERVERS
STORAGE AND
PROCESSING
1560
1550
Interface
Wireless or Wired
1540
1565
Information
Communication
System
1500
SMART
DEVICE
1504
WiFi/
Cellular/
Comm.
1502
Display /
Feedback
1501
GPS/
Location
1572
Display/
Feedback
1571
GPS/
Location
1573
Audio
1570
MACHINE
SMART
DEVICES
1590
1590
USER
1510
POWERED
BIOMEDICAL
DEVICES
1513
Sensors

FIG. 15B

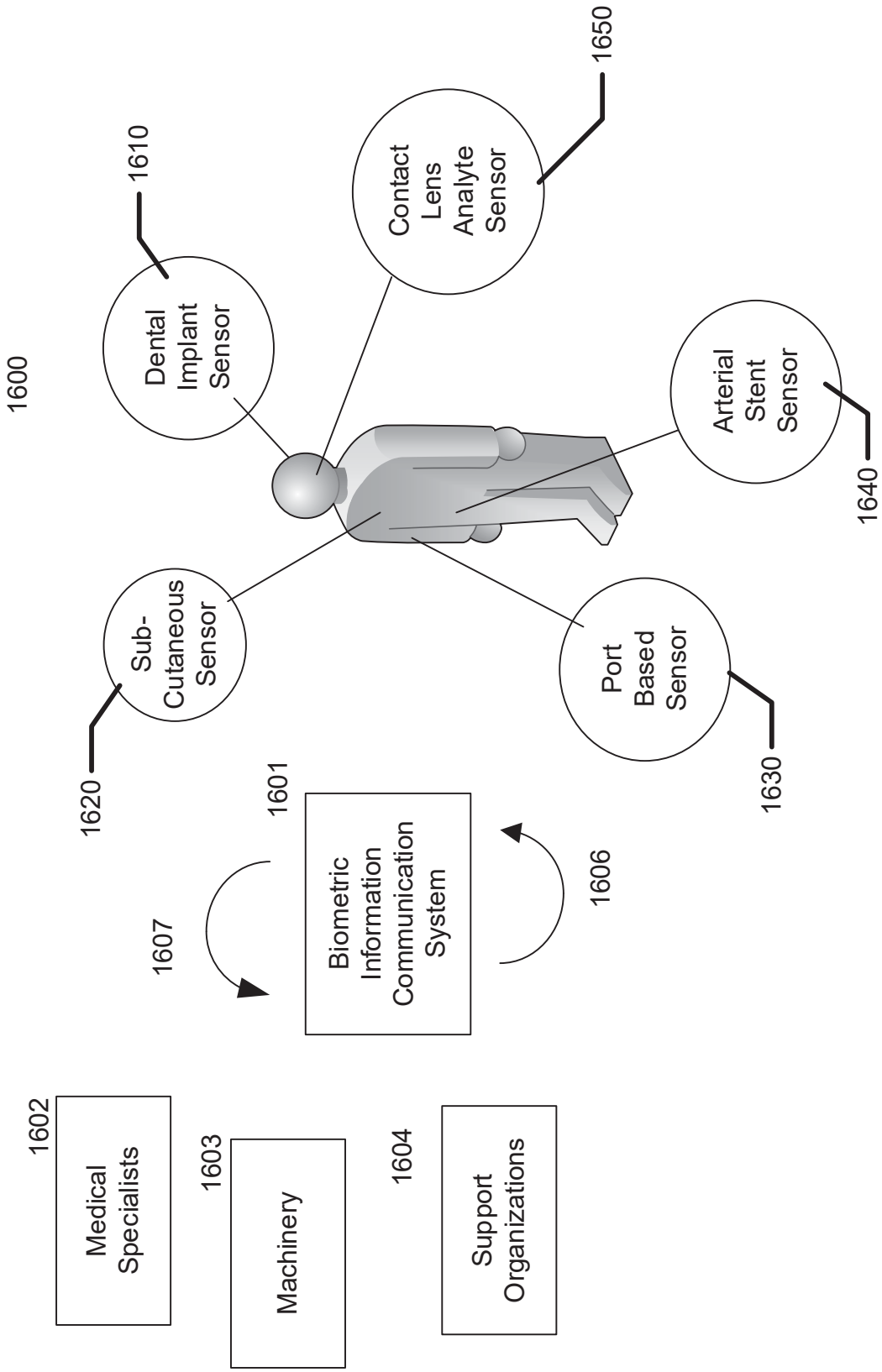

1600
Dental Implant Sensor
1610
Contact Lens Analyte Sensor
1650
Arterial Stent Sensor
1640
Sub-Cutaneous Sensor
1620
Port Based Sensor
1630
1601
Biometric Information Communication System
1607
1606
1602
Medical Specialists
1603
Machinery
1604
Support Organizations

FIG. 16

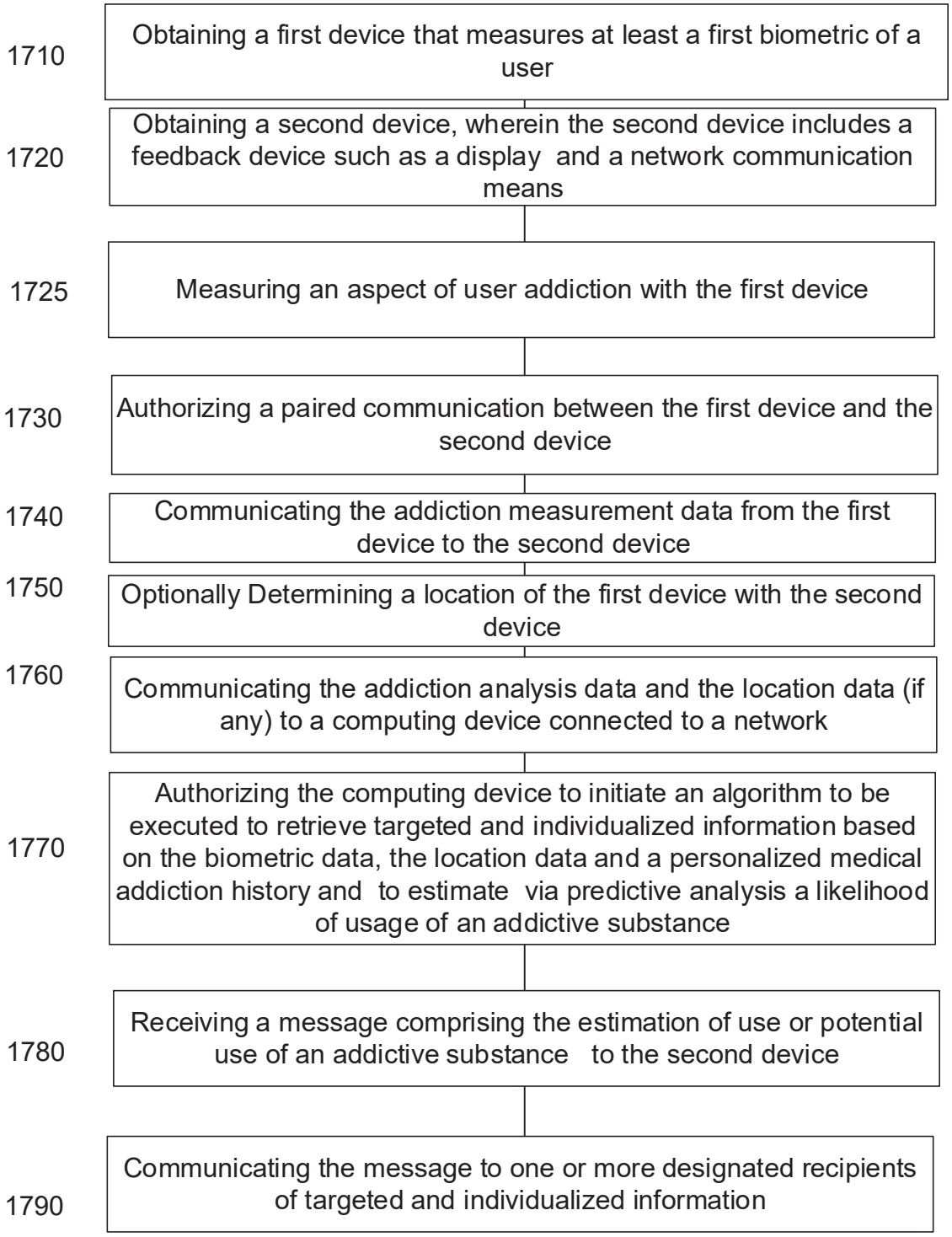

1710
Obtaining a first device that measures at least a first biometric of a user
1720
Obtaining a second device, wherein the second device includes a feedback device such as a display and a network communication means
1725
Measuring an aspect of user addiction with the first device
1730
Authorizing a paired communication between the first device and the second device
1740
Communicating the addiction measurement data from the first device to the second device
1750
Optionally Determining a location of the first device with the second device
1760
Communicating the addiction analysis data and the location data (if any) to a computing device connected to a network
1770
Authorizing the computing device to initiate an algorithm to be executed to retrieve targeted and individualized information based on the biometric data, the location data and a personalized medical addiction history and to estimate via predictive analysis a likelihood of usage of an addictive substance
1780
Receiving a message comprising the estimation of use or potential use of an addictive substance to the second device
1790
Communicating the message to one or more designated recipients of targeted and individualized information

FIG. 17

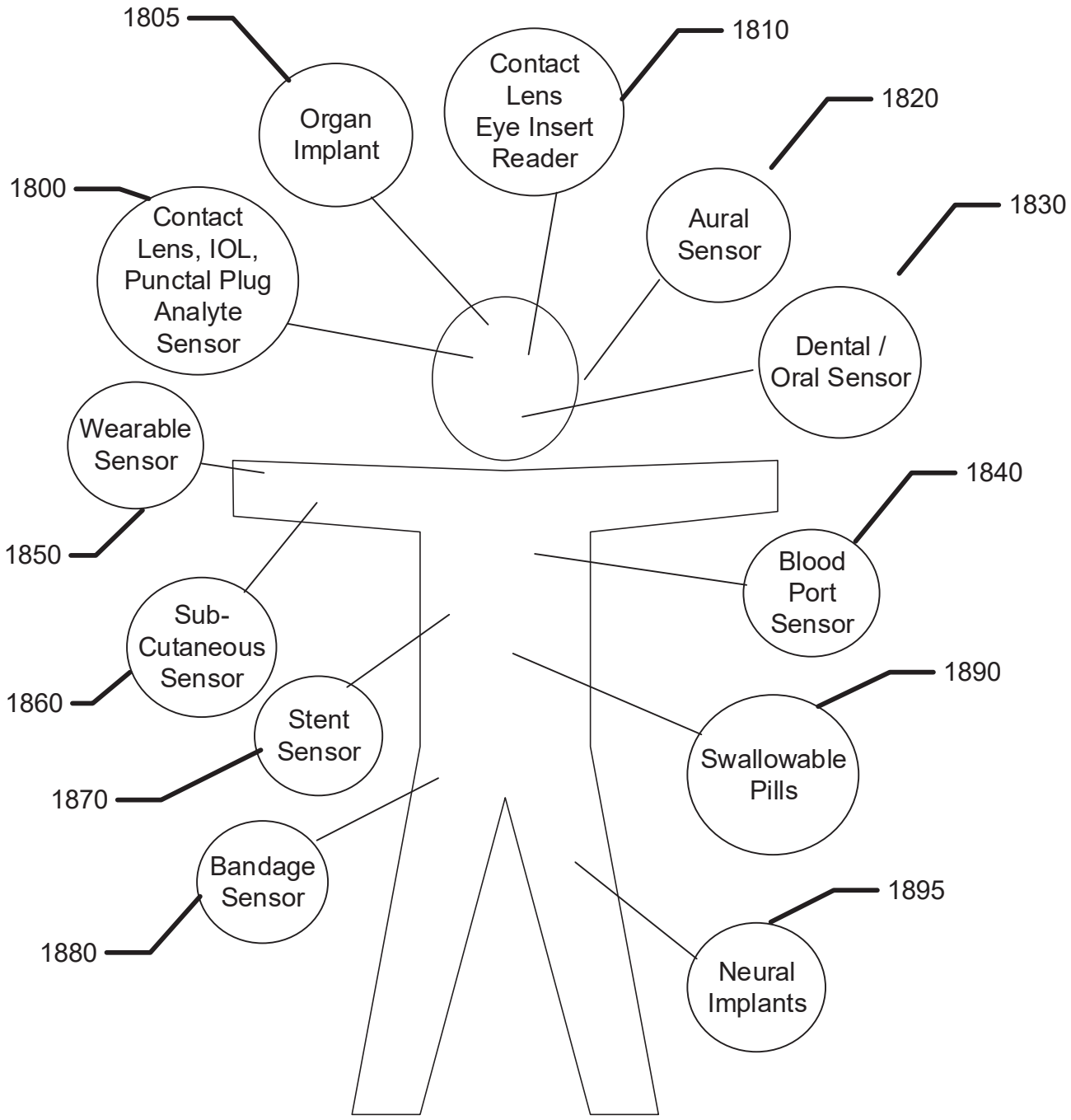

1805
Organ Implant
1810
Contact Lens Eye Insert Reader
1820
Aural Sensor
1800
Contact Lens, IOL, Punctal Plug Analyte Sensor
1830
Dental / Oral Sensor
Wearable Sensor
1840
1850
Blood Port Sensor
Sub-Cutaneous Sensor
1890
1860
Stent Sensor
Swallowable Pills
1870
Bandage Sensor
1895
1880
Neural Implants

FIG. 18