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(54) **DATA PROCESSING METHOD AND SYSTEM FOR PROCESSING AND MANAGING REPETITIVE MOTION DATA BETWEEN DIVERSE GEOGRAPHIC LOCATIONS**

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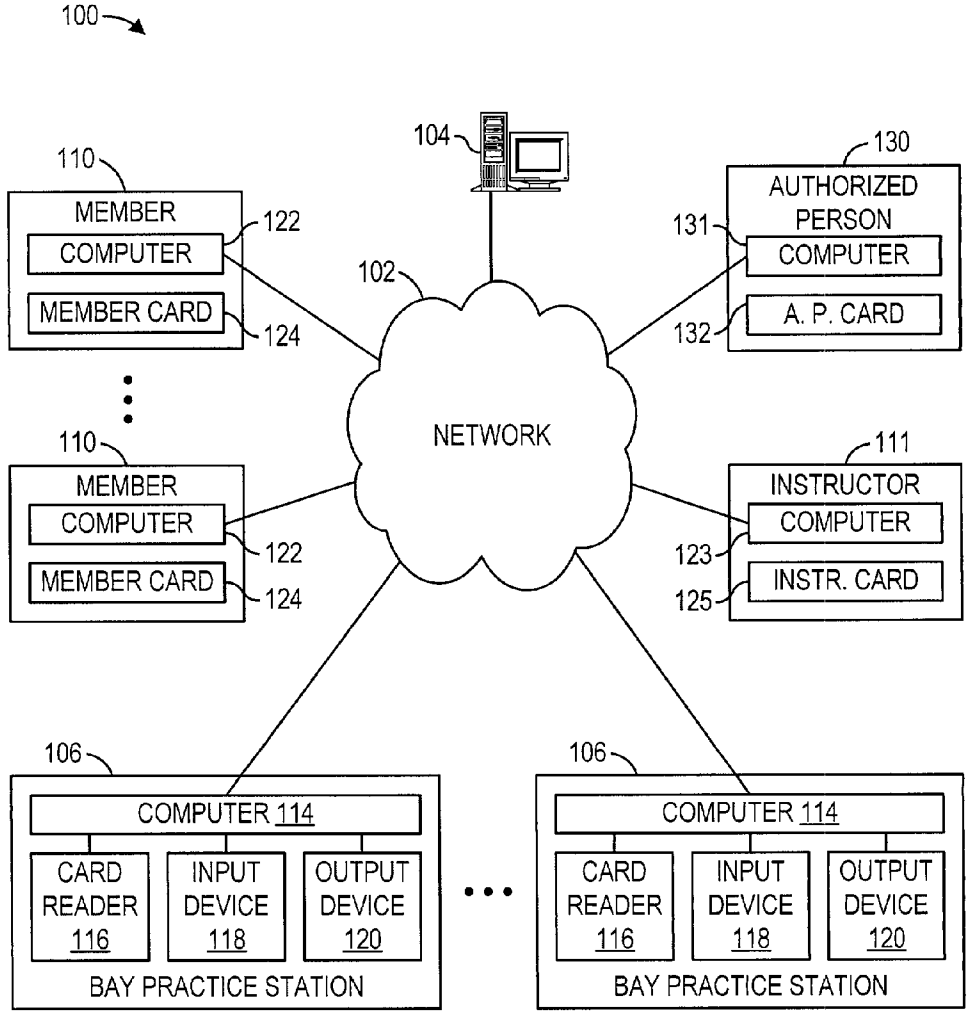
(52) **U.S. Cl.** ..... **434/252**

(57) **ABSTRACT**

Data is managed by monitoring and generating data describing at least one first repetitive motion, such as a golf swing, executed by at least one individual at at least one first repetitive motion station located at at least one first location, and for monitoring and generating data describing at least one second repetitive motion executed by the at least one individual at at least one second repetitive motion station located at at least one second location geographically separated from the at least one first location. The data is transmitted from the first and second stations via a network to a network server computer having a data storage device, onto which the data is stored.



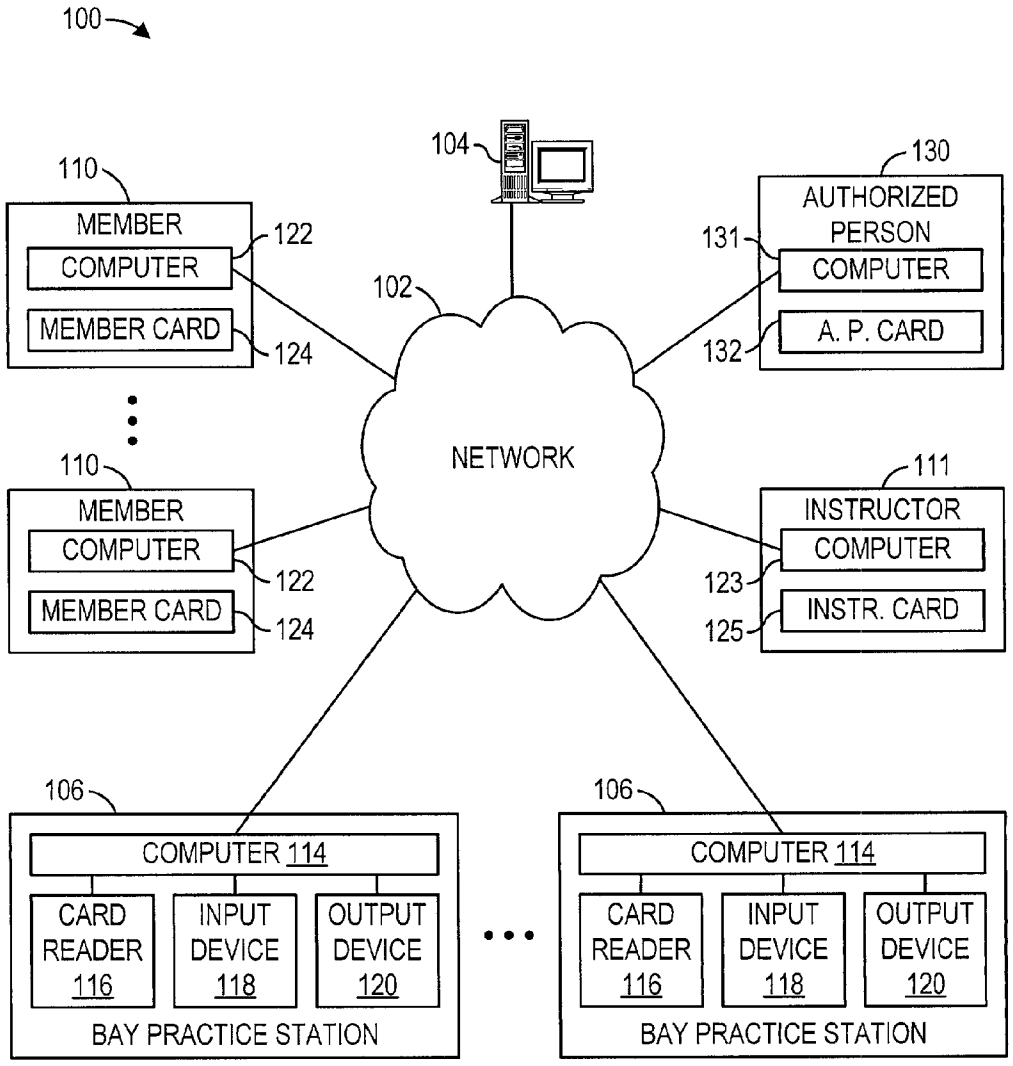

100
104
110
MEMBER
COMPUTER
122
MEMBER CARD
124
102
130
AUTHORIZED PERSON
131
COMPUTER
A. P. CARD
132
NETWORK
110
MEMBER
COMPUTER
122
MEMBER CARD
124
111
INSTRUCTOR
COMPUTER
123
INSTR. CARD
125
106
COMPUTER 114
CARD READER 116
INPUT DEVICE 118
OUTPUT DEVICE 120
BAY PRACTICE STATION
106
COMPUTER 114
CARD READER 116
INPUT DEVICE 118
OUTPUT DEVICE 120
BAY PRACTICE STATION

*FIG. 1*

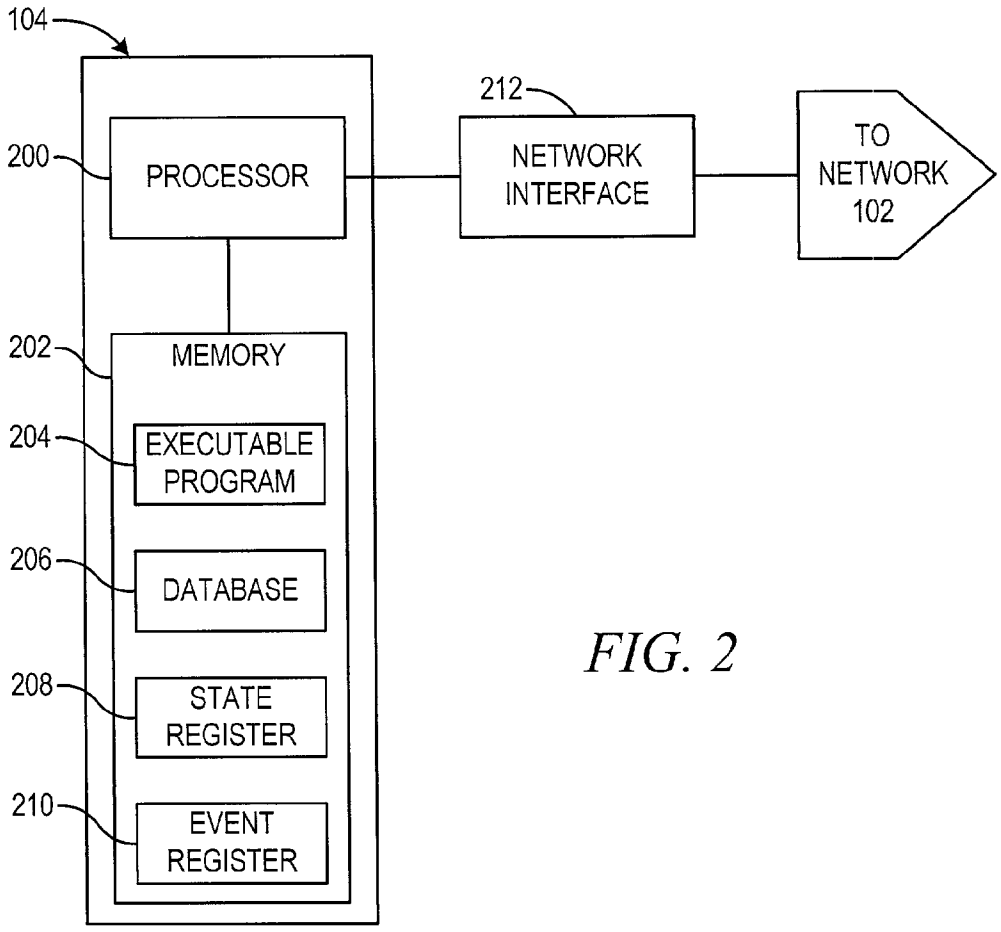

104
200
PROCESSOR
212
NETWORK INTERFACE
TO NETWORK 102
202
MEMORY
204
EXECUTABLE PROGRAM
206
DATABASE
208
STATE REGISTER
210
EVENT REGISTER

*FIG. 2*

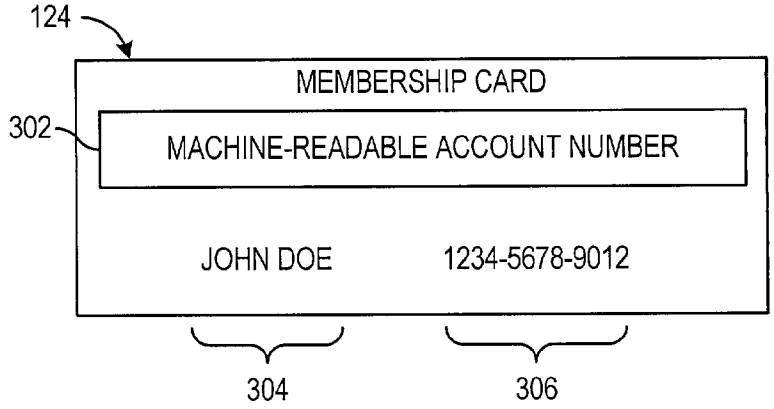

124
MEMBERSHIP CARD
302
MACHINE-READABLE ACCOUNT NUMBER
JOHN DOE
1234-5678-9012
304
306

*FIG. 3*

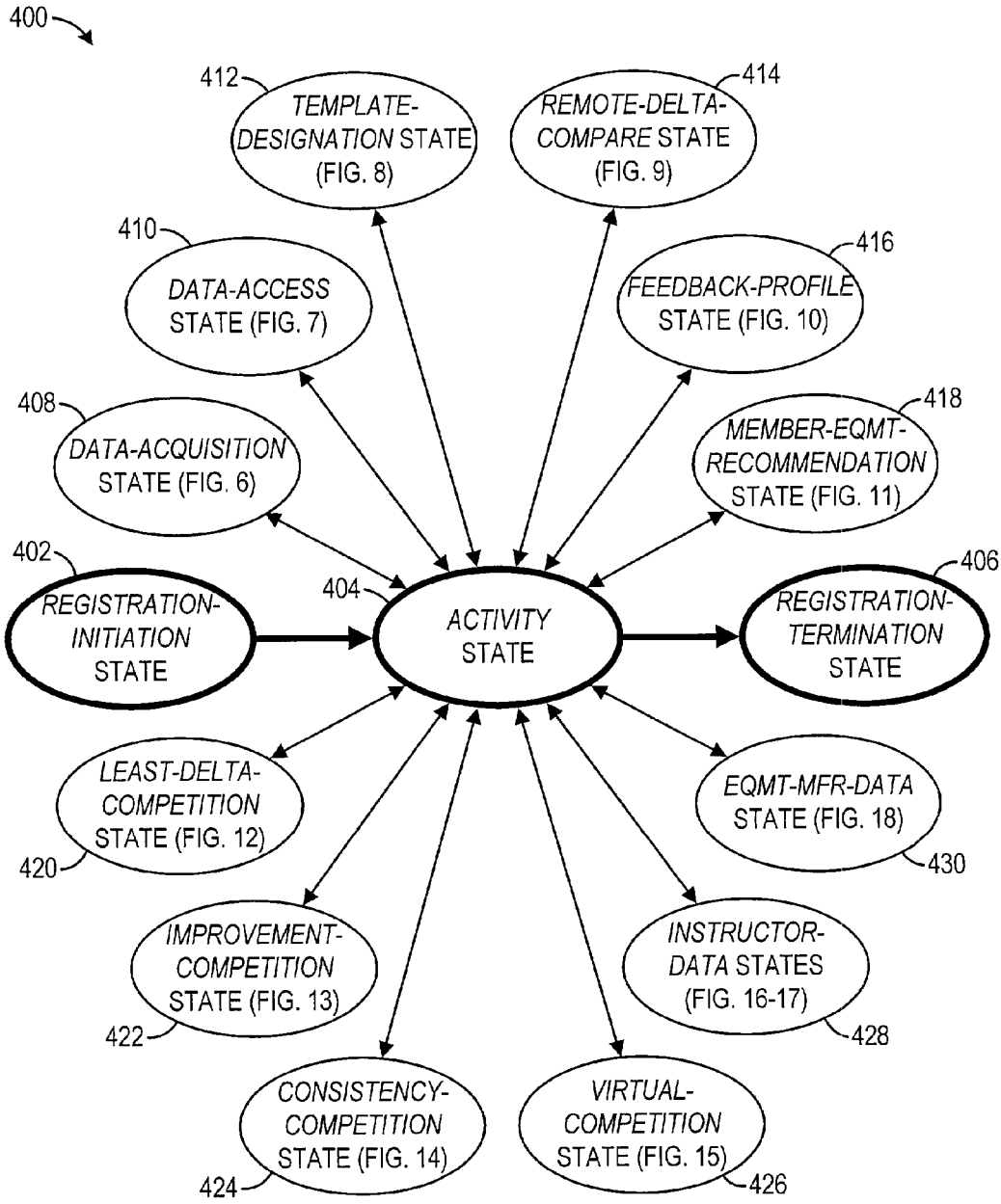

400
412
TEMPLATE-DESIGNATION STATE (FIG. 8)
414
REMOTE-DELTA-COMPARE STATE (FIG. 9)
410
DATA-ACCESS STATE (FIG. 7)
416
FEEDBACK-PROFILE STATE (FIG. 10)
408
DATA-ACQUISITION STATE (FIG. 6)
418
MEMBER-EQMT-RECOMMENDATION STATE (FIG. 11)
402
REGISTRATION-INITIATION STATE
404
ACTIVITY STATE
406
REGISTRATION-TERMINATION STATE
LEAST-DELTA-COMPETITION STATE (FIG. 12)
420
EQMT-MFR-DATA STATE (FIG. 18)
430
IMPROVEMENT-COMPETITION STATE (FIG. 13)
422
INSTRUCTOR-DATA STATES (FIG. 16-17)
428
CONSISTENCY-COMPETITION STATE (FIG. 14)
424
VIRTUAL-COMPETITION STATE (FIG. 15)
426

*FIG. 4*

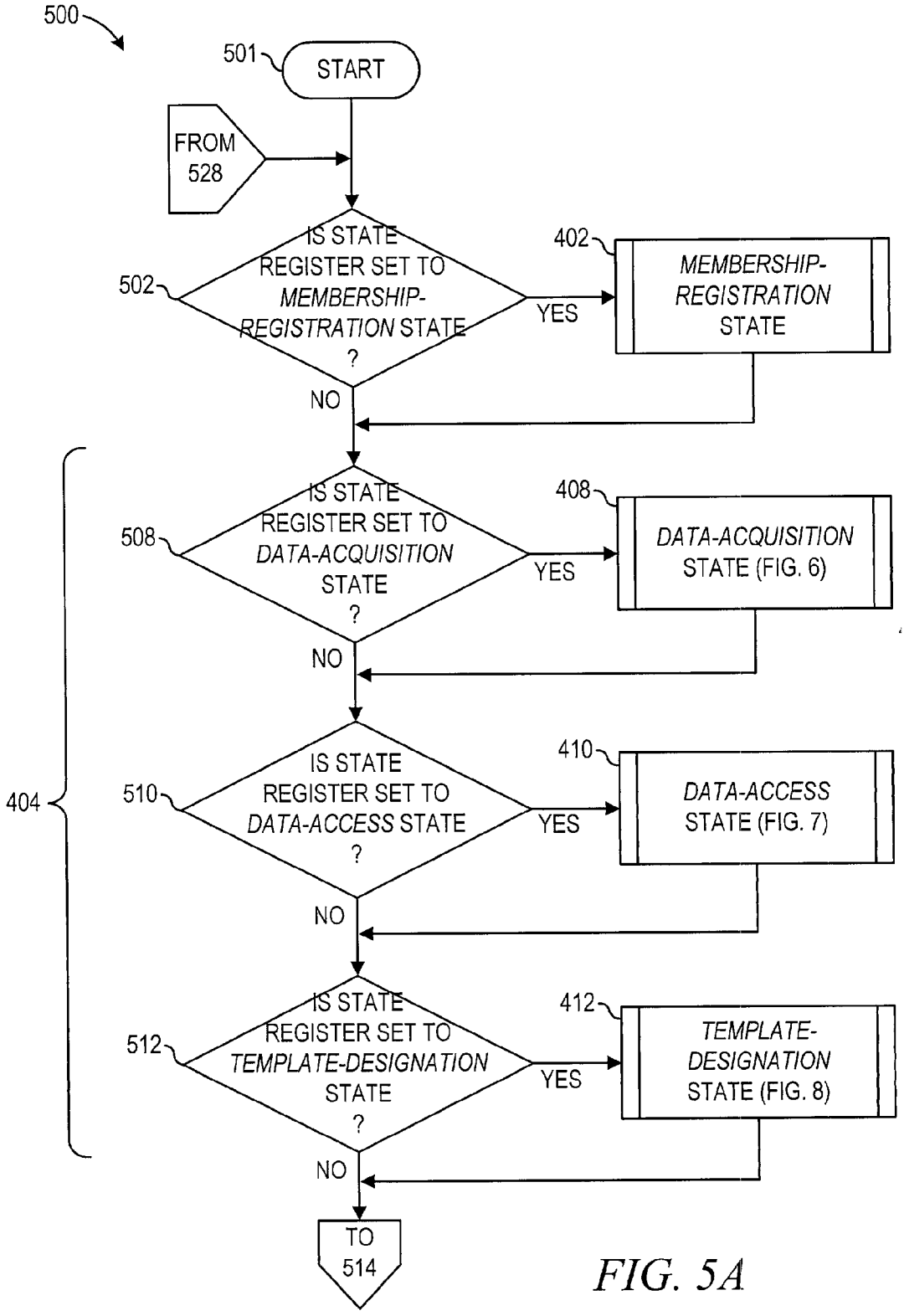

500
501
START
FROM 528
IS STATE REGISTER SET TO MEMBERSHIP-REGISTRATION STATE ?
502
YES
402
MEMBERSHIP-REGISTRATION STATE
NO
IS STATE REGISTER SET TO DATA-ACQUISITION STATE ?
508
YES
408
DATA-ACQUISITION STATE (FIG. 6)
NO
IS STATE REGISTER SET TO DATA-ACCESS STATE ?
510
YES
410
DATA-ACCESS STATE (FIG. 7)
NO
IS STATE REGISTER SET TO TEMPLATE-DESIGNATION STATE ?
512
YES
412
TEMPLATE-DESIGNATION STATE (FIG. 8)
NO
404
TO 514

*FIG. 5A*

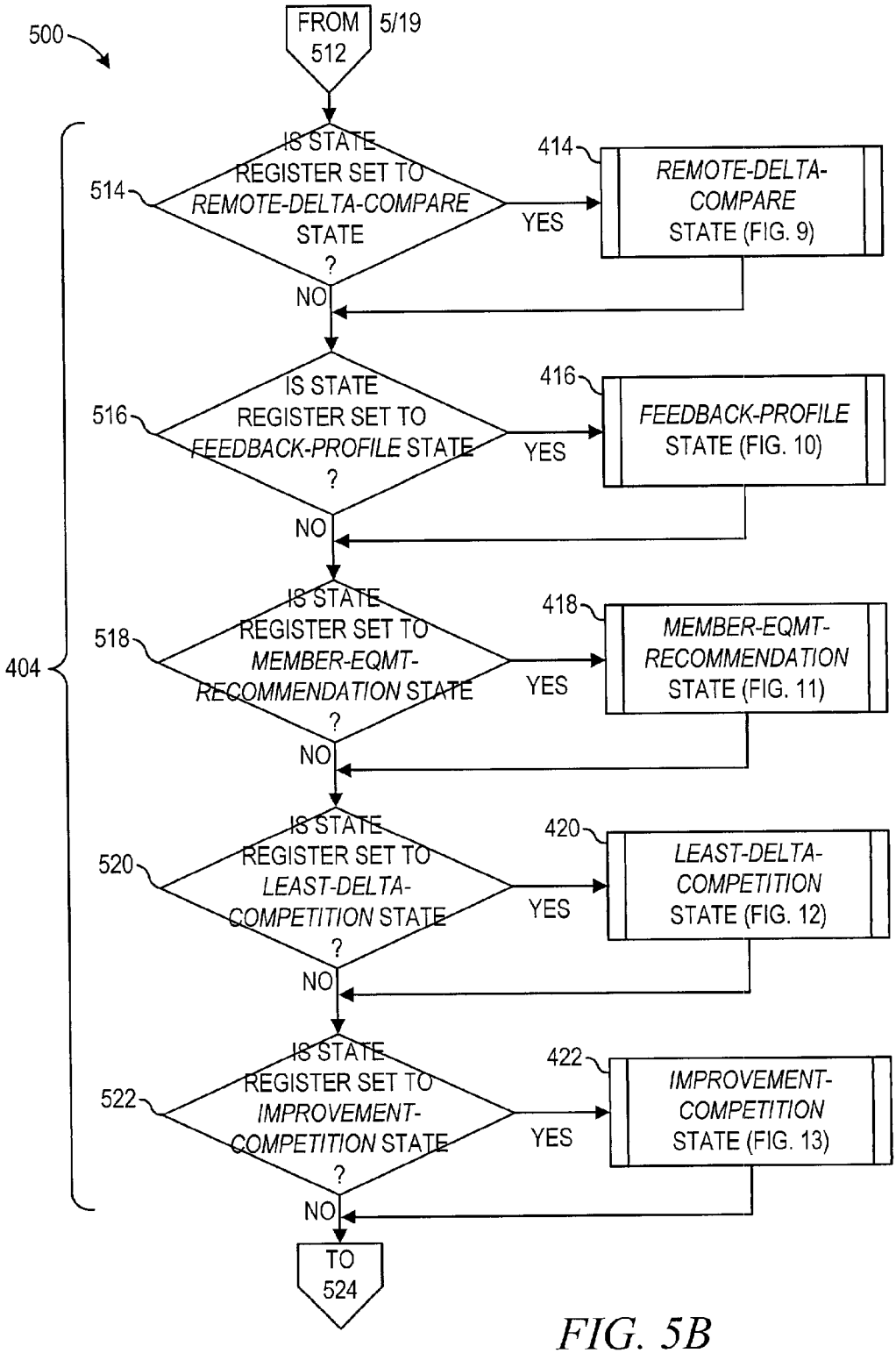

500
FROM 512
5/19
404
514
IS STATE REGISTER SET TO REMOTE-DELTA-COMPARE STATE ?
YES
NO
414
REMOTE-DELTA-COMPARE STATE (FIG. 9)
516
IS STATE REGISTER SET TO FEEDBACK-PROFILE STATE ?
YES
NO
416
FEEDBACK-PROFILE STATE (FIG. 10)
518
IS STATE REGISTER SET TO MEMBER-EQMT-RECOMMENDATION STATE ?
YES
NO
418
MEMBER-EQMT-RECOMMENDATION STATE (FIG. 11)
520
IS STATE REGISTER SET TO LEAST-DELTA-COMPETITION STATE ?
YES
NO
420
LEAST-DELTA-COMPETITION STATE (FIG. 12)
522
IS STATE REGISTER SET TO IMPROVEMENT-COMPETITION STATE ?
YES
NO
422
IMPROVEMENT-COMPETITION STATE (FIG. 13)
TO 524

*FIG. 5B*

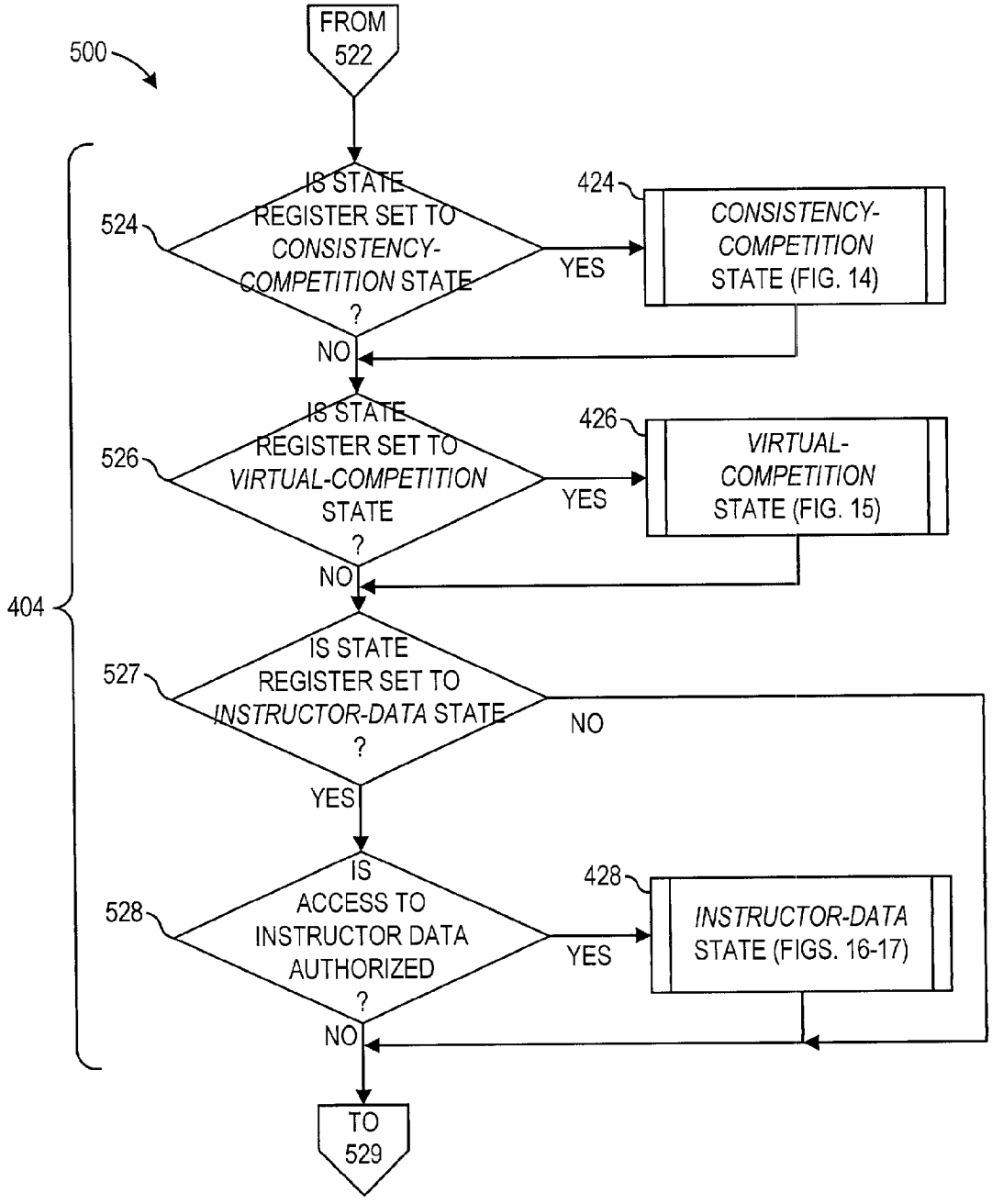

500
FROM 522
IS STATE REGISTER SET TO CONSISTENCY-COMPETITION STATE ?
524
YES
424
CONSISTENCY-COMPETITION STATE (FIG. 14)
NO
IS STATE REGISTER SET TO VIRTUAL-COMPETITION STATE ?
526
YES
426
VIRTUAL-COMPETITION STATE (FIG. 15)
NO
404
IS STATE REGISTER SET TO INSTRUCTOR-DATA STATE ?
527
NO
YES
IS ACCESS TO INSTRUCTOR DATA AUTHORIZED ?
528
YES
428
INSTRUCTOR-DATA STATE (FIGS. 16-17)
NO
TO 529

*FIG. 5C*

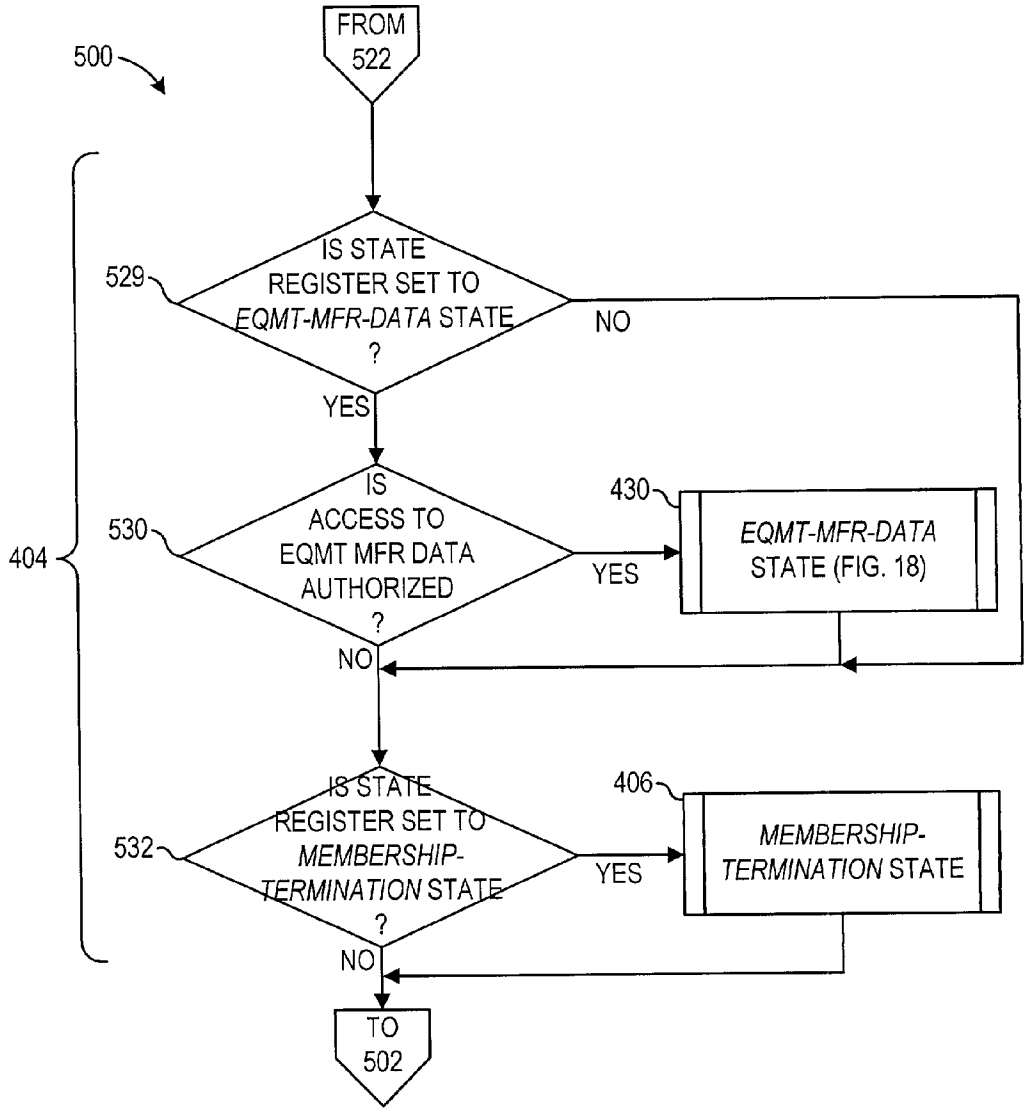

500
FROM 522
529
IS STATE REGISTER SET TO EQMT-MFR-DATA STATE ?
NO
YES
530
IS ACCESS TO EQMT MFR DATA AUTHORIZED ?
YES
430
EQMT-MFR-DATA STATE (FIG. 18)
NO
404
532
IS STATE REGISTER SET TO MEMBERSHIP-TERMINATION STATE ?
YES
406
MEMBERSHIP-TERMINATION STATE
NO
TO 502

*FIG. 5D*

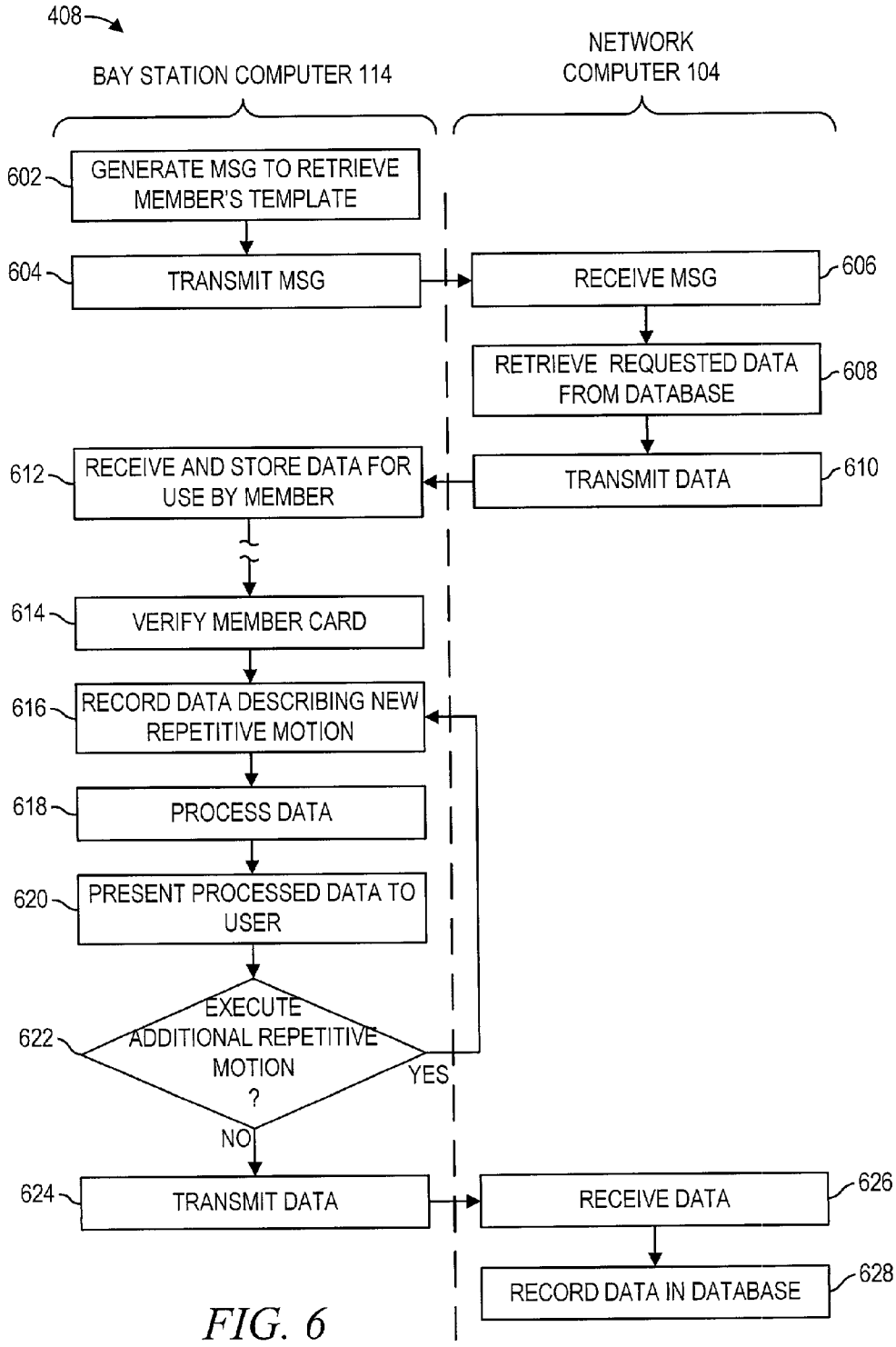

408
BAY STATION COMPUTER 114
NETWORK COMPUTER 104
602
GENERATE MSG TO RETRIEVE MEMBER'S TEMPLATE
604
TRANSMIT MSG
RECEIVE MSG
606
RETRIEVE REQUESTED DATA FROM DATABASE
608
TRANSMIT DATA
610
612
RECEIVE AND STORE DATA FOR USE BY MEMBER
614
VERIFY MEMBER CARD
616
RECORD DATA DESCRIBING NEW REPETITIVE MOTION
618
PROCESS DATA
620
PRESENT PROCESSED DATA TO USER
622
EXECUTE ADDITIONAL REPETITIVE MOTION ?
YES
NO
624
TRANSMIT DATA
RECEIVE DATA
626
RECORD DATA IN DATABASE
628

*FIG. 6*

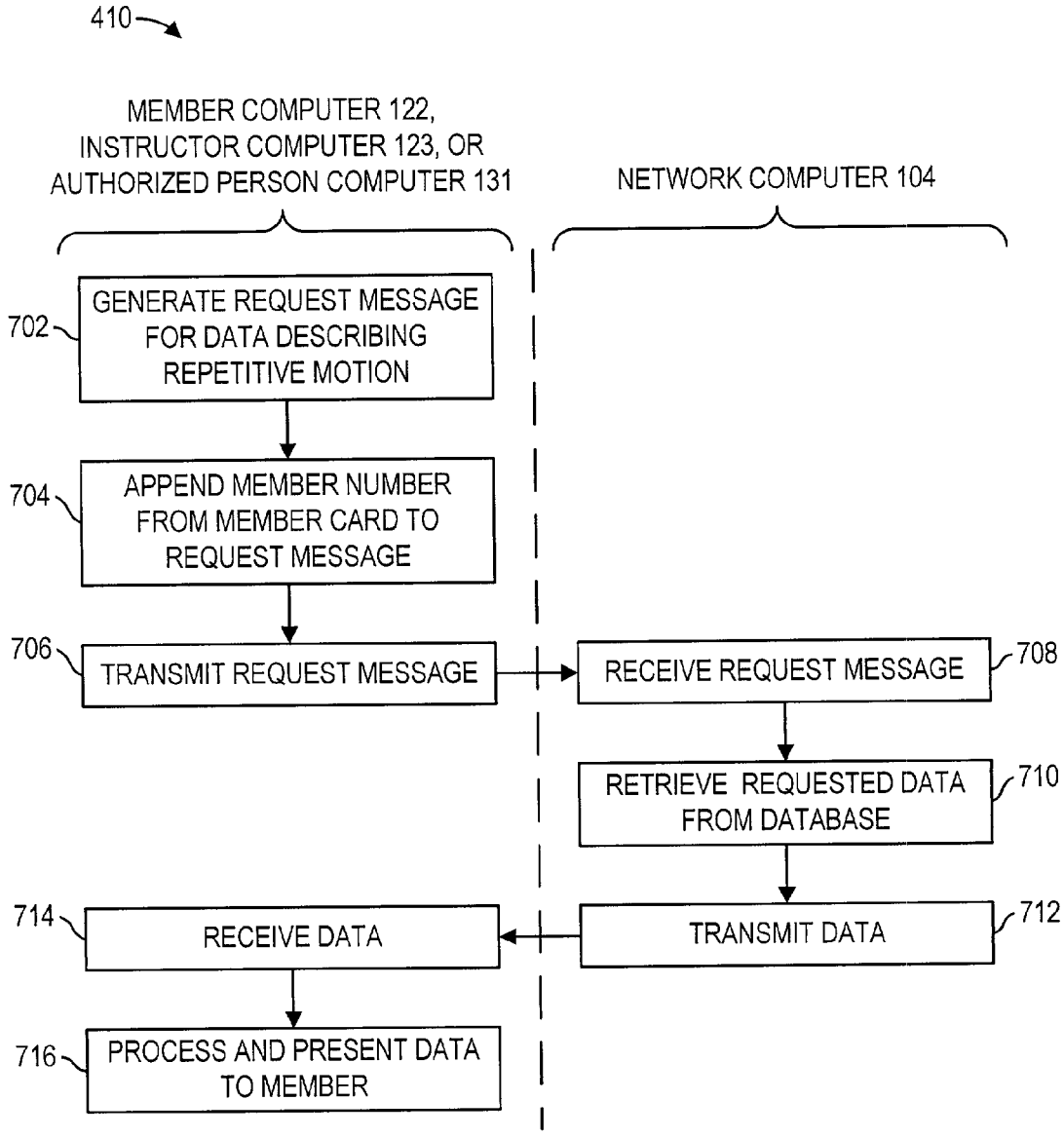

410
MEMBER COMPUTER 122, INSTRUCTOR COMPUTER 123, OR AUTHORIZED PERSON COMPUTER 131
NETWORK COMPUTER 104
702
GENERATE REQUEST MESSAGE FOR DATA DESCRIBING REPETITIVE MOTION
704
APPEND MEMBER NUMBER FROM MEMBER CARD TO REQUEST MESSAGE
706
TRANSMIT REQUEST MESSAGE
RECEIVE REQUEST MESSAGE
708
RETRIEVE REQUESTED DATA FROM DATABASE
710
TRANSMIT DATA
712
714
RECEIVE DATA
716
PROCESS AND PRESENT DATA TO MEMBER

*FIG. 7*

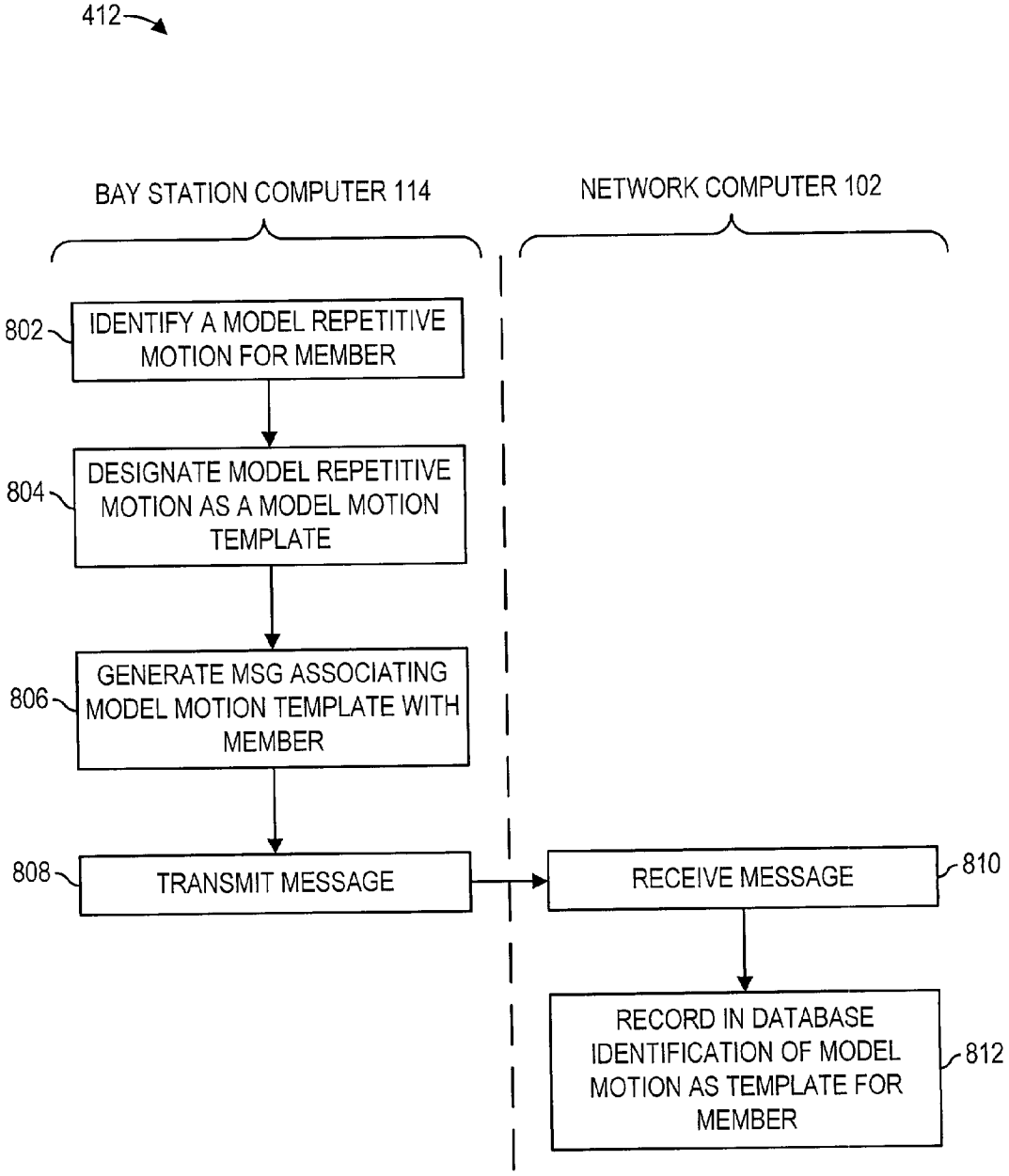

412
BAY STATION COMPUTER 114
NETWORK COMPUTER 102
802
IDENTIFY A MODEL REPETITIVE MOTION FOR MEMBER
804
DESIGNATE MODEL REPETITIVE MOTION AS A MODEL MOTION TEMPLATE
806
GENERATE MSG ASSOCIATING MODEL MOTION TEMPLATE WITH MEMBER
808
TRANSMIT MESSAGE
RECEIVE MESSAGE
810
RECORD IN DATABASE IDENTIFICATION OF MODEL MOTION AS TEMPLATE FOR MEMBER
812

*FIG. 8*

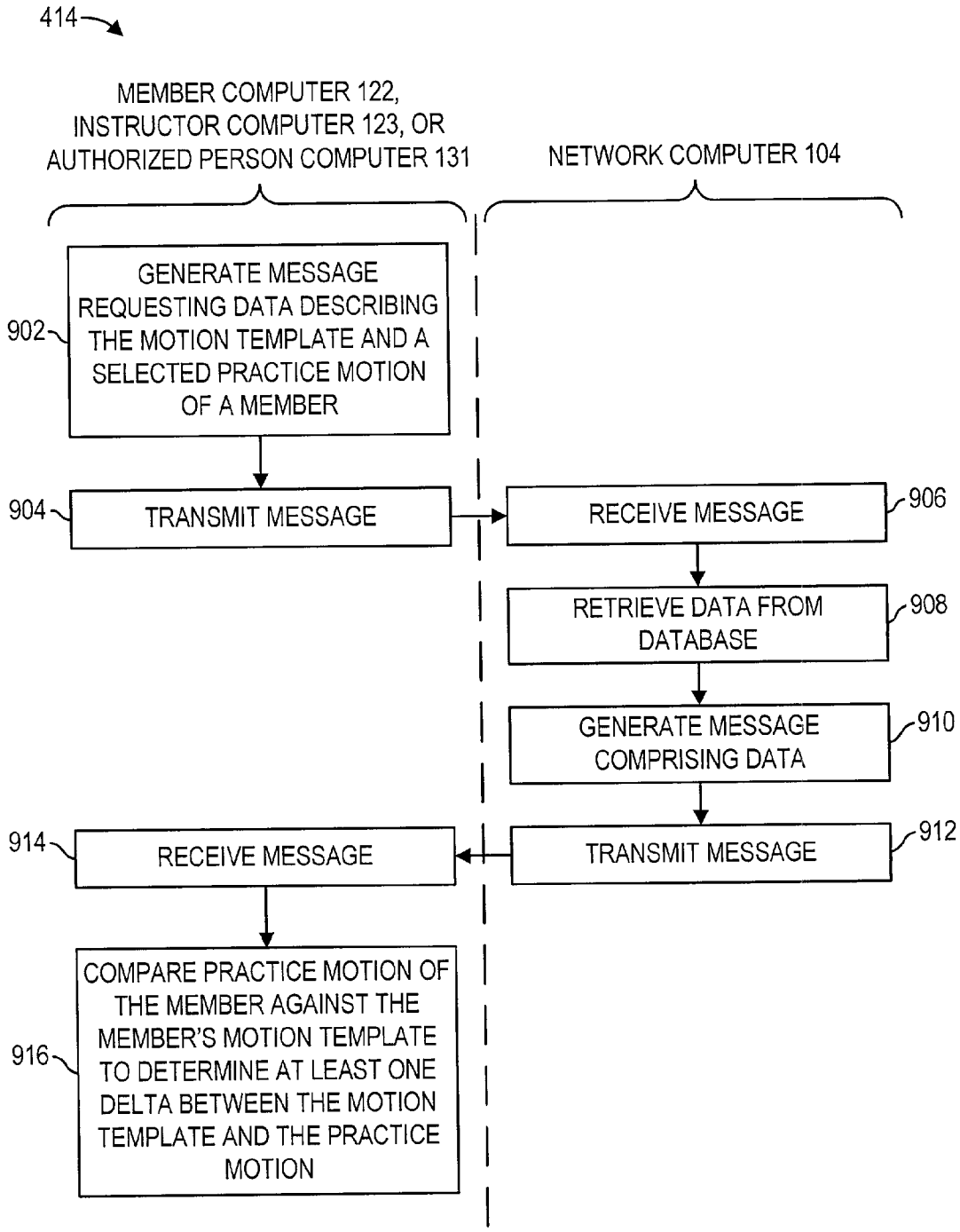

414
MEMBER COMPUTER 122, INSTRUCTOR COMPUTER 123, OR AUTHORIZED PERSON COMPUTER 131
NETWORK COMPUTER 104
902
GENERATE MESSAGE REQUESTING DATA DESCRIBING THE MOTION TEMPLATE AND A SELECTED PRACTICE MOTION OF A MEMBER
904
TRANSMIT MESSAGE
RECEIVE MESSAGE
906
RETRIEVE DATA FROM DATABASE
908
GENERATE MESSAGE COMPRISING DATA
910
914
RECEIVE MESSAGE
TRANSMIT MESSAGE
912
916
COMPARE PRACTICE MOTION OF THE MEMBER AGAINST THE MEMBER'S MOTION TEMPLATE TO DETERMINE AT LEAST ONE DELTA BETWEEN THE MOTION TEMPLATE AND THE PRACTICE MOTION

*FIG. 9*

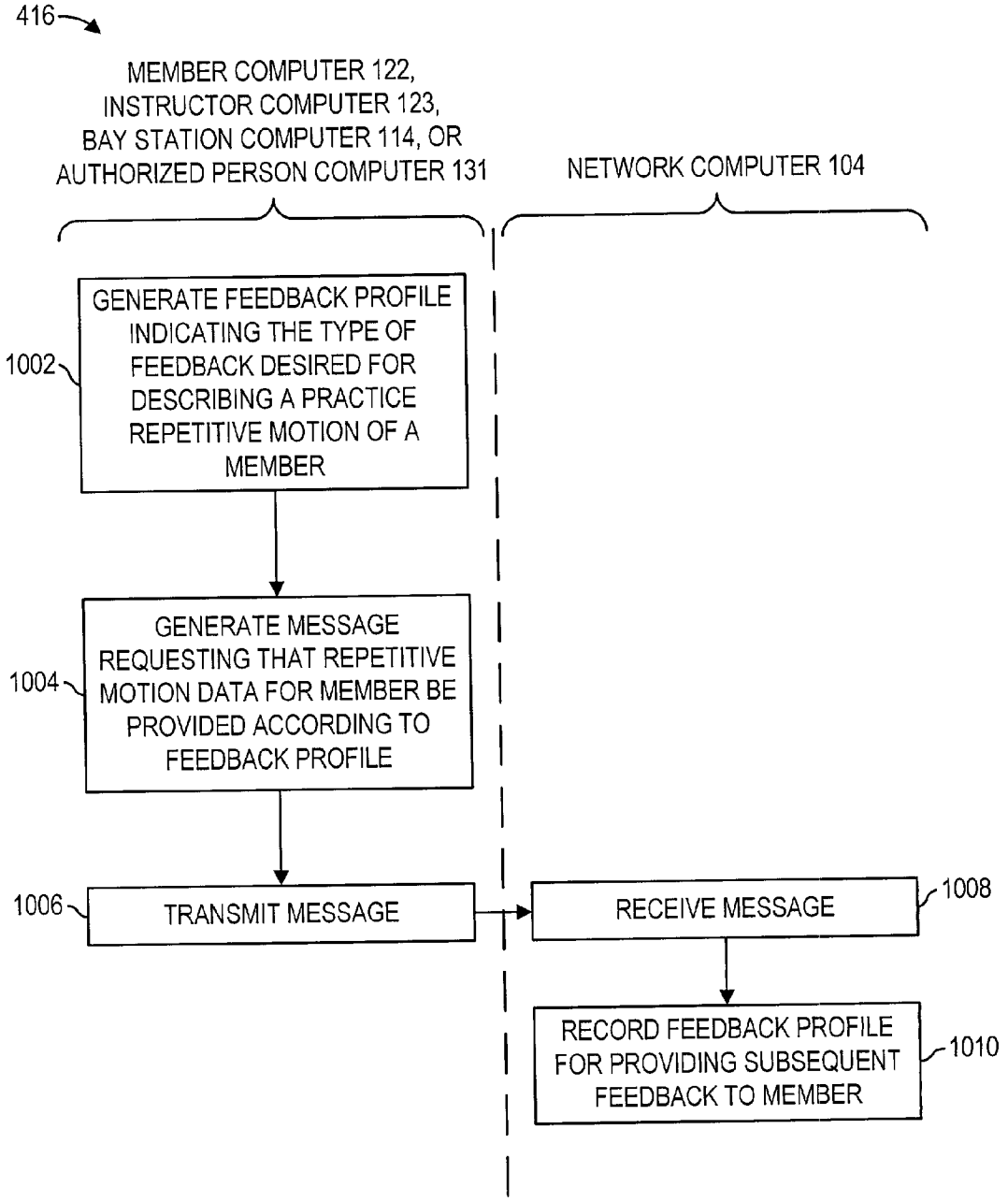

416
MEMBER COMPUTER 122, INSTRUCTOR COMPUTER 123, BAY STATION COMPUTER 114, OR AUTHORIZED PERSON COMPUTER 131
NETWORK COMPUTER 104
1002
GENERATE FEEDBACK PROFILE INDICATING THE TYPE OF FEEDBACK DESIRED FOR DESCRIBING A PRACTICE REPETITIVE MOTION OF A MEMBER
1004
GENERATE MESSAGE REQUESTING THAT REPETITIVE MOTION DATA FOR MEMBER BE PROVIDED ACCORDING TO FEEDBACK PROFILE
1006
TRANSMIT MESSAGE
RECEIVE MESSAGE
1008
RECORD FEEDBACK PROFILE FOR PROVIDING SUBSEQUENT FEEDBACK TO MEMBER
1010

*FIG. 10*

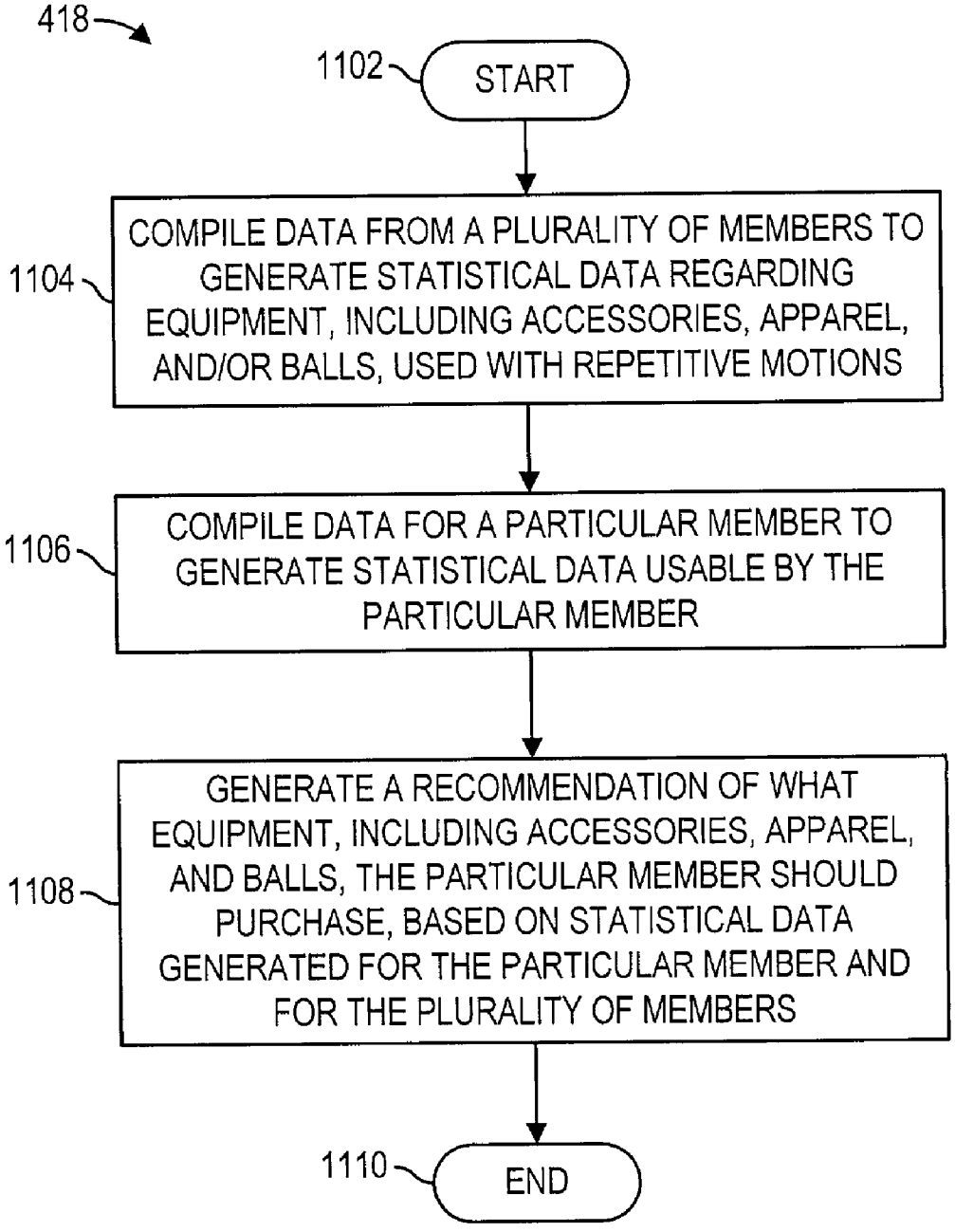

418
1102
START
COMPILE DATA FROM A PLURALITY OF MEMBERS TO GENERATE STATISTICAL DATA REGARDING EQUIPMENT, INCLUDING ACCESSORIES, APPAREL, AND/OR BALLS, USED WITH REPETITIVE MOTIONS
1104
COMPILE DATA FOR A PARTICULAR MEMBER TO GENERATE STATISTICAL DATA USABLE BY THE PARTICULAR MEMBER
1106
GENERATE A RECOMMENDATION OF WHAT EQUIPMENT, INCLUDING ACCESSORIES, APPAREL, AND BALLS, THE PARTICULAR MEMBER SHOULD PURCHASE, BASED ON STATISTICAL DATA GENERATED FOR THE PARTICULAR MEMBER AND FOR THE PLURALITY OF MEMBERS
1108
1110
END

*FIG. 11*

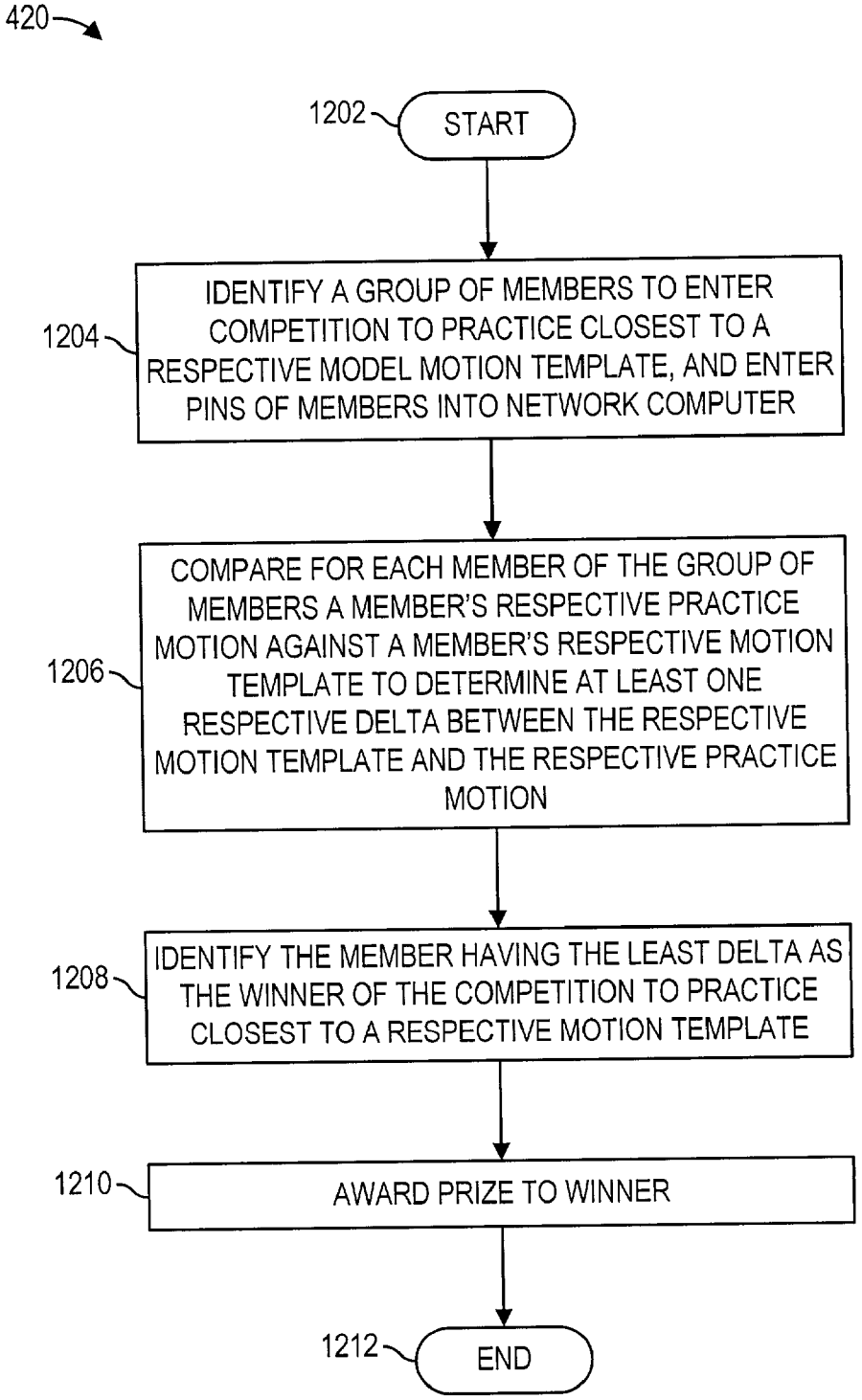

420
1202
START
IDENTIFY A GROUP OF MEMBERS TO ENTER COMPETITION TO PRACTICE CLOSEST TO A RESPECTIVE MODEL MOTION TEMPLATE, AND ENTER PINS OF MEMBERS INTO NETWORK COMPUTER
1204
COMPARE FOR EACH MEMBER OF THE GROUP OF MEMBERS A MEMBER'S RESPECTIVE PRACTICE MOTION AGAINST A MEMBER'S RESPECTIVE MOTION TEMPLATE TO DETERMINE AT LEAST ONE RESPECTIVE DELTA BETWEEN THE RESPECTIVE MOTION TEMPLATE AND THE RESPECTIVE PRACTICE MOTION
1206
IDENTIFY THE MEMBER HAVING THE LEAST DELTA AS THE WINNER OF THE COMPETITION TO PRACTICE CLOSEST TO A RESPECTIVE MOTION TEMPLATE
1208
AWARD PRIZE TO WINNER
1210
END
1212

*FIG. 12*

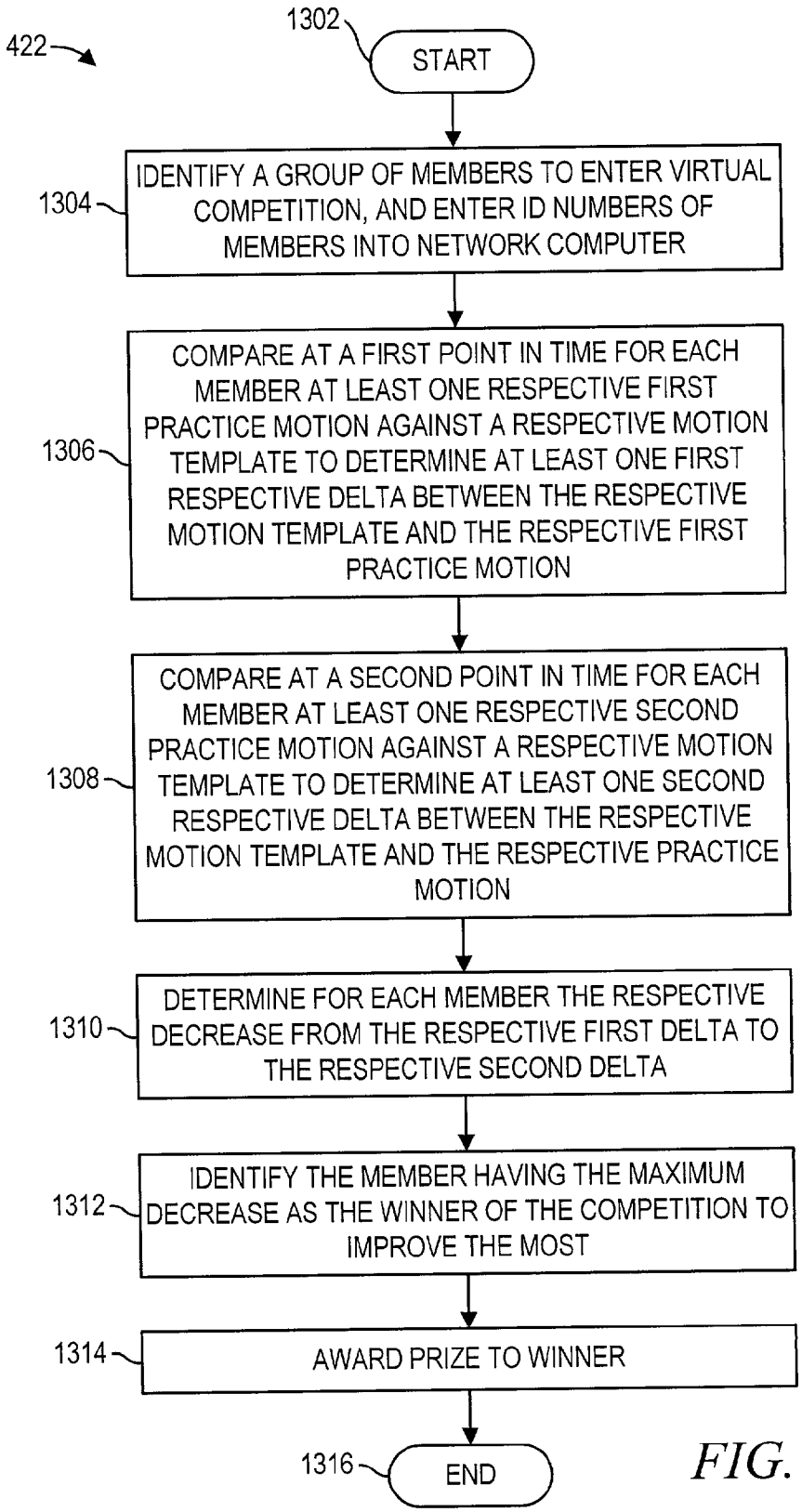

422
1302
START
IDENTIFY A GROUP OF MEMBERS TO ENTER VIRTUAL COMPETITION, AND ENTER ID NUMBERS OF MEMBERS INTO NETWORK COMPUTER
1304
COMPARE AT A FIRST POINT IN TIME FOR EACH MEMBER AT LEAST ONE RESPECTIVE FIRST PRACTICE MOTION AGAINST A RESPECTIVE MOTION TEMPLATE TO DETERMINE AT LEAST ONE FIRST RESPECTIVE DELTA BETWEEN THE RESPECTIVE MOTION TEMPLATE AND THE RESPECTIVE FIRST PRACTICE MOTION
1306
COMPARE AT A SECOND POINT IN TIME FOR EACH MEMBER AT LEAST ONE RESPECTIVE SECOND PRACTICE MOTION AGAINST A RESPECTIVE MOTION TEMPLATE TO DETERMINE AT LEAST ONE SECOND RESPECTIVE DELTA BETWEEN THE RESPECTIVE MOTION TEMPLATE AND THE RESPECTIVE PRACTICE MOTION
1308
DETERMINE FOR EACH MEMBER THE RESPECTIVE DECREASE FROM THE RESPECTIVE FIRST DELTA TO THE RESPECTIVE SECOND DELTA
1310
IDENTIFY THE MEMBER HAVING THE MAXIMUM DECREASE AS THE WINNER OF THE COMPETITION TO IMPROVE THE MOST
1312
AWARD PRIZE TO WINNER
1314
END
1316

*FIG. 13*

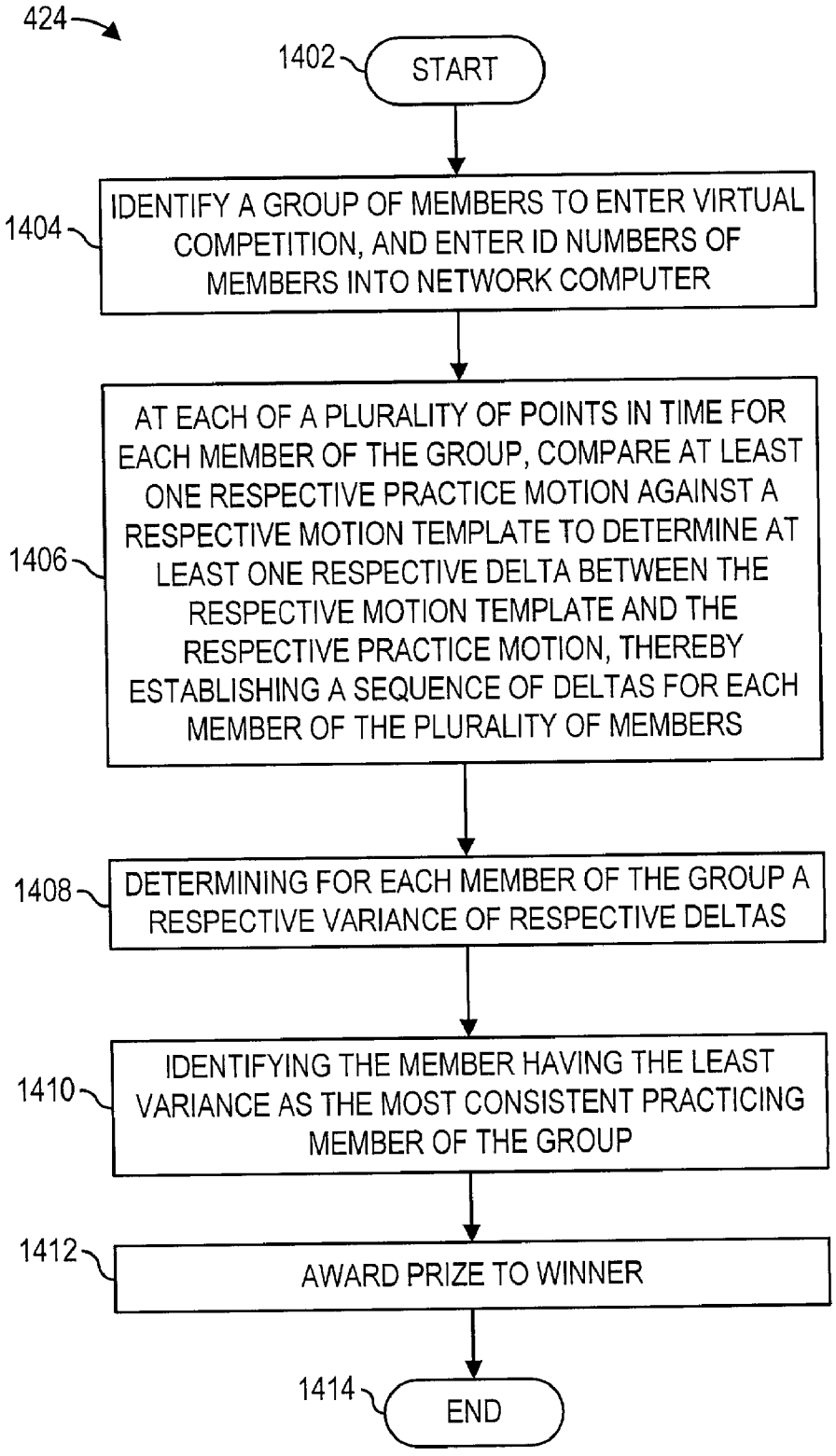

424
1402
START
1404
IDENTIFY A GROUP OF MEMBERS TO ENTER VIRTUAL COMPETITION, AND ENTER ID NUMBERS OF MEMBERS INTO NETWORK COMPUTER
1406
AT EACH OF A PLURALITY OF POINTS IN TIME FOR EACH MEMBER OF THE GROUP, COMPARE AT LEAST ONE RESPECTIVE PRACTICE MOTION AGAINST A RESPECTIVE MOTION TEMPLATE TO DETERMINE AT LEAST ONE RESPECTIVE DELTA BETWEEN THE RESPECTIVE MOTION TEMPLATE AND THE RESPECTIVE PRACTICE MOTION, THEREBY ESTABLISHING A SEQUENCE OF DELTAS FOR EACH MEMBER OF THE PLURALITY OF MEMBERS
1408
DETERMINING FOR EACH MEMBER OF THE GROUP A RESPECTIVE VARIANCE OF RESPECTIVE DELTAS
1410
IDENTIFYING THE MEMBER HAVING THE LEAST VARIANCE AS THE MOST CONSISTENT PRACTICING MEMBER OF THE GROUP
1412
AWARD PRIZE TO WINNER
1414
END

*FIG. 14*

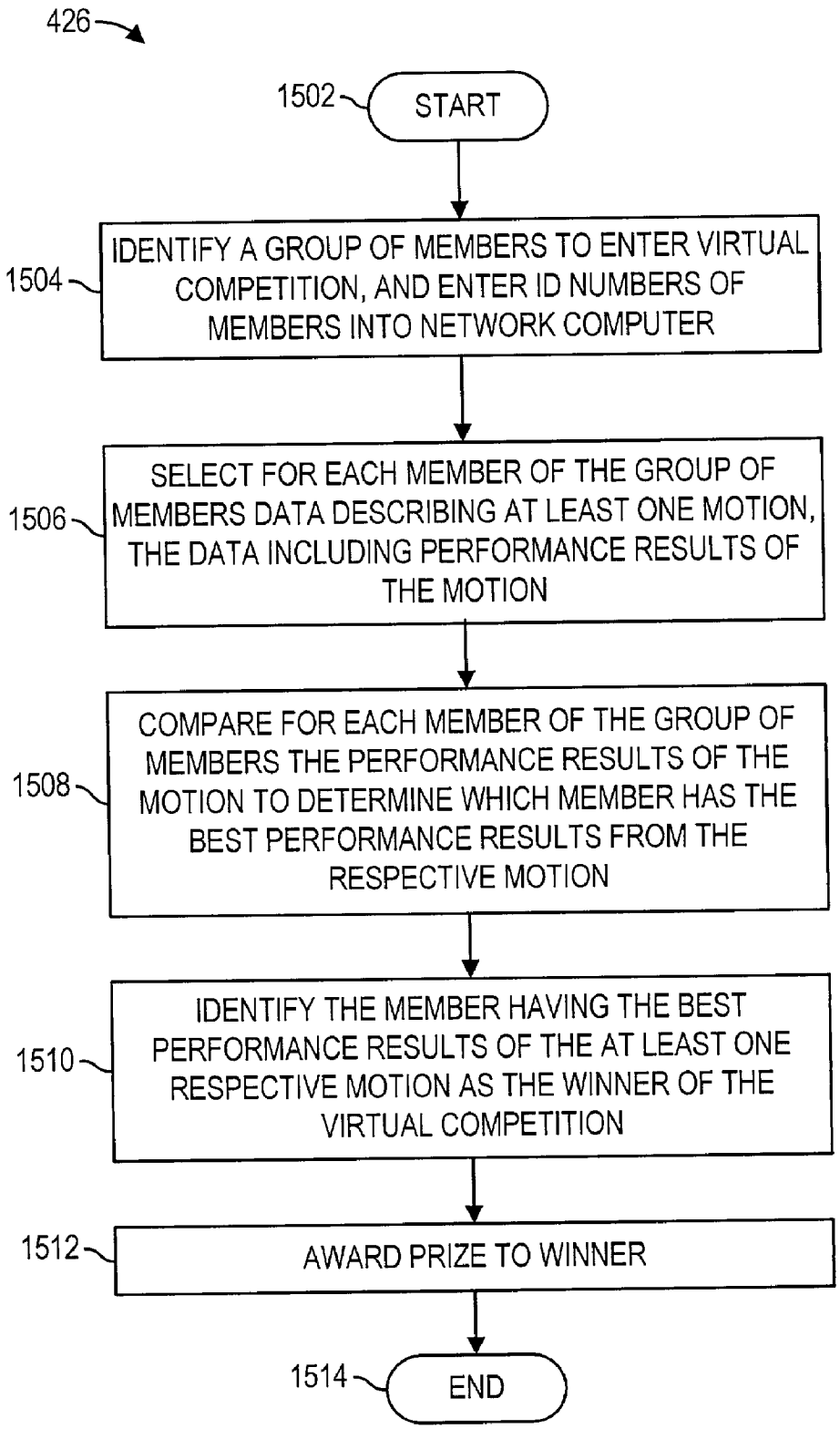

426
1502
START
IDENTIFY A GROUP OF MEMBERS TO ENTER VIRTUAL COMPETITION, AND ENTER ID NUMBERS OF MEMBERS INTO NETWORK COMPUTER
1504
SELECT FOR EACH MEMBER OF THE GROUP OF MEMBERS DATA DESCRIBING AT LEAST ONE MOTION, THE DATA INCLUDING PERFORMANCE RESULTS OF THE MOTION
1506
COMPARE FOR EACH MEMBER OF THE GROUP OF MEMBERS THE PERFORMANCE RESULTS OF THE MOTION TO DETERMINE WHICH MEMBER HAS THE BEST PERFORMANCE RESULTS FROM THE RESPECTIVE MOTION
1508
IDENTIFY THE MEMBER HAVING THE BEST PERFORMANCE RESULTS OF THE AT LEAST ONE RESPECTIVE MOTION AS THE WINNER OF THE VIRTUAL COMPETITION
1510
AWARD PRIZE TO WINNER
1512
END
1514

*FIG. 15*

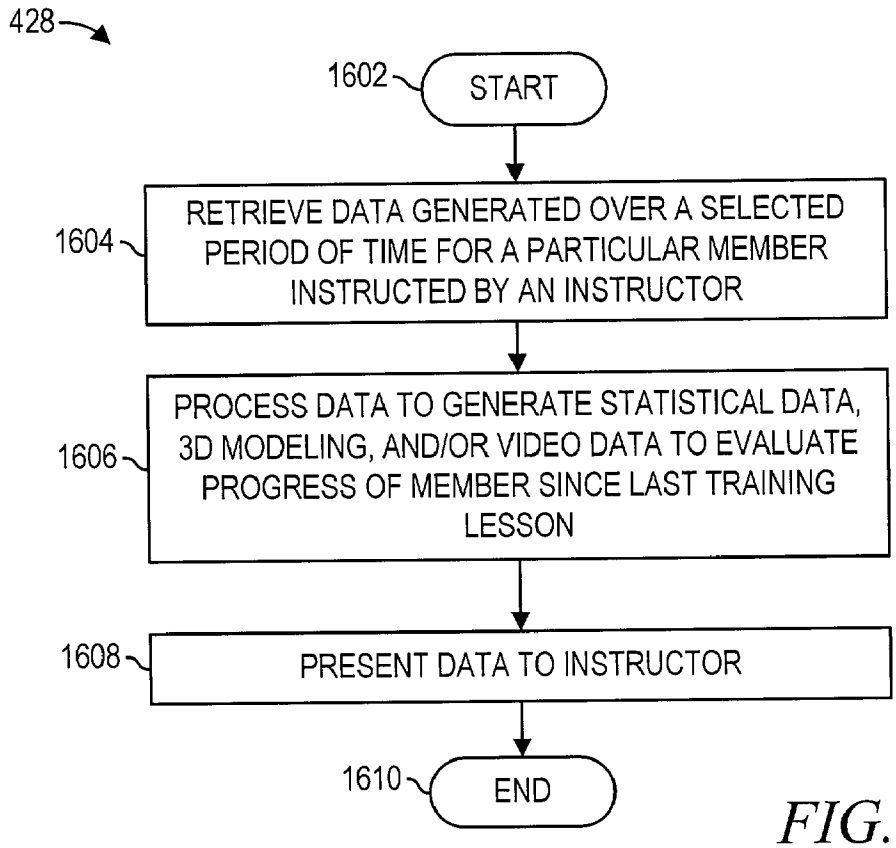

428
1602
START
RETRIEVE DATA GENERATED OVER A SELECTED PERIOD OF TIME FOR A PARTICULAR MEMBER INSTRUCTED BY AN INSTRUCTOR
1604
PROCESS DATA TO GENERATE STATISTICAL DATA, 3D MODELING, AND/OR VIDEO DATA TO EVALUATE PROGRESS OF MEMBER SINCE LAST TRAINING LESSON
1606
PRESENT DATA TO INSTRUCTOR
1608
END
1610

*FIG. 16*

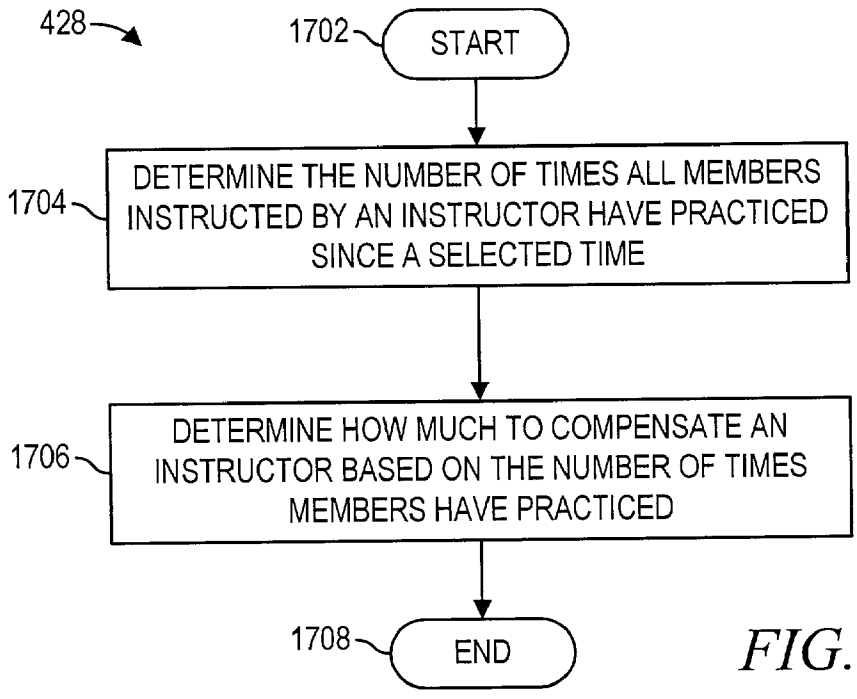

428
1702
START
DETERMINE THE NUMBER OF TIMES ALL MEMBERS INSTRUCTED BY AN INSTRUCTOR HAVE PRACTICED SINCE A SELECTED TIME
1704
DETERMINE HOW MUCH TO COMPENSATE AN INSTRUCTOR BASED ON THE NUMBER OF TIMES MEMBERS HAVE PRACTICED
1706
END
1708

*FIG. 17*

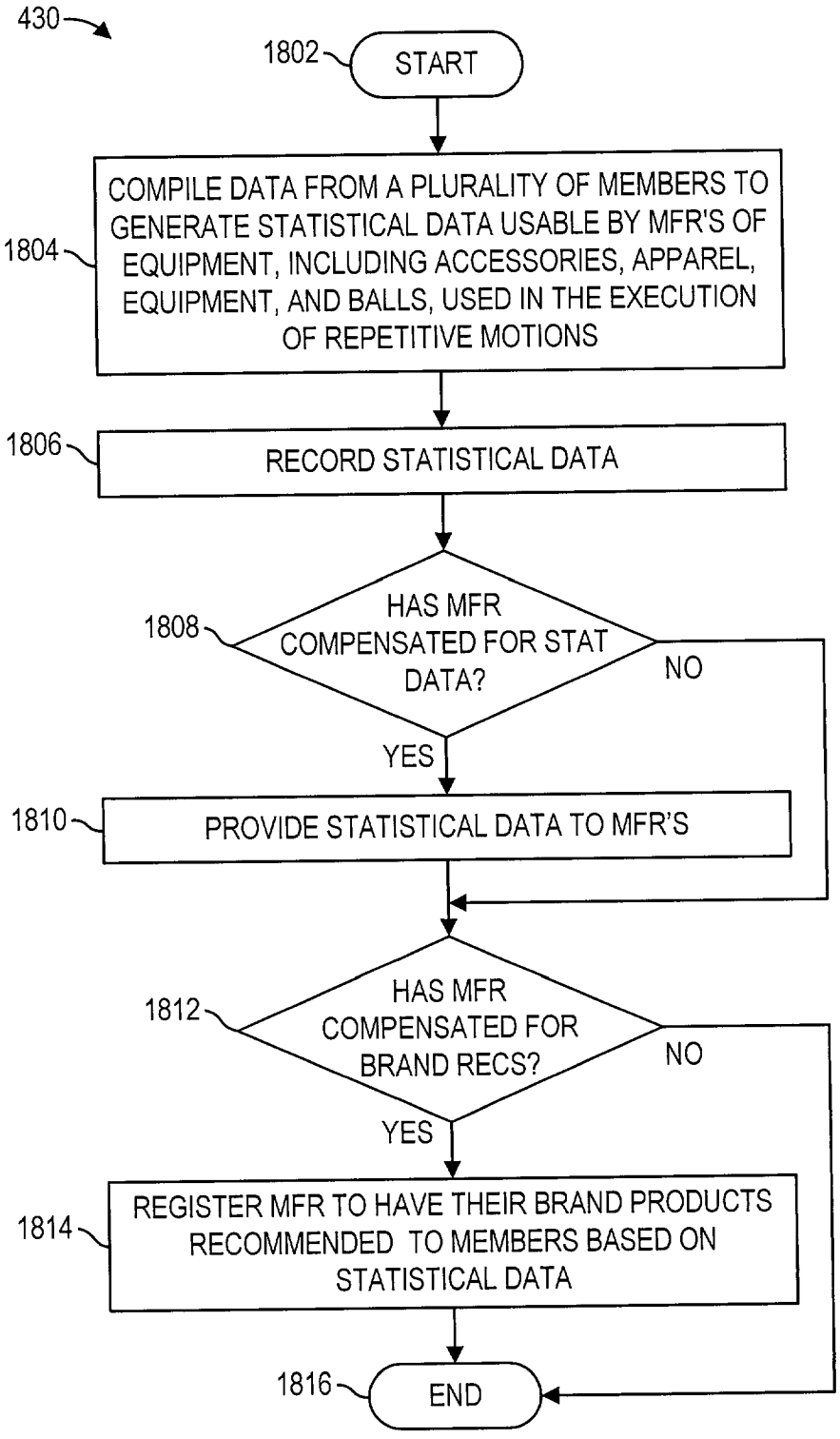

430
1802
START
COMPILE DATA FROM A PLURALITY OF MEMBERS TO GENERATE STATISTICAL DATA USABLE BY MFR'S OF EQUIPMENT, INCLUDING ACCESSORIES, APPAREL, EQUIPMENT, AND BALLS, USED IN THE EXECUTION OF REPETITIVE MOTIONS
1804
1806
RECORD STATISTICAL DATA
1808
HAS MFR COMPENSATED FOR STAT DATA?
NO
YES
1810
PROVIDE STATISTICAL DATA TO MFR'S
1812
HAS MFR COMPENSATED FOR BRAND RECS?
NO
YES
1814
REGISTER MFR TO HAVE THEIR BRAND PRODUCTS RECOMMENDED TO MEMBERS BASED ON STATISTICAL DATA
1816
END

*FIG. 18*

# DATA PROCESSING METHOD AND SYSTEM FOR PROCESSING AND MANAGING REPETITIVE MOTION DATA BETWEEN DIVERSE GEOGRAPHIC LOCATIONS

## CROSS-REFERENCES TO RELATED APPLICATIONS

[0001] This application is a continuation-in-part of co-pending U.S. patent application Ser. No. 09/957,223, entitled "REPETITIVE MOTION FEEDBACK SYSTEM AND METHOD OF PRACTICING A REPETITIVE MOTION", filed on Sep. 20, 2001, on behalf of Evensen et al. (Attorney Docket No. DYGI-30021), hereinafter referred to as the '223 application.

## BACKGROUND

[0002] Numerous and varied methods and systems have been developed for practicing repetitive motions executed by an individual (i.e., a person or user), particularly those motions used for sports, recreational or athletic activities, such as golf or tennis. Such methods and systems typically focus on one particular aspect of the repetitive motion, such as the grip, position, or orientation of the individual's head or body, or the position or orientation of the device or instrument being held or moved by the individual during the repetitive motion. In many cases, a practice device is employed that secures to the individual or the object moved by the individual to restrict or limit the ability to make undesirable movements. Many of these devices are used only during practice and would not otherwise be used during normal play or performance of the repetitive motion. Additionally, such devices are often cumbersome and difficult to use, making them undesirable.

[0003] Despite the many devices and methods that have been developed, one of the best methods of practicing repetitive movements merely involves the use of a coach or professional instructor who actually observes the individual or student during practice of the repetitive motion. After observation of the individual, the instructor can provide feedback to the individual regarding their performance and communicate ways to improve upon the individual's performance.

[0004] The use of an instructor has obvious limitations, however. The time and attention an instructor can give may be limited, particularly if there is more than one student that must be observed during a particular practice session. And even if private or one-on-one instruction is used, seldom will an instructor be available to supervise all of the individual's practice sessions or be able to fully observe each and every repetitive motion performed by the individual during the practice session. Furthermore, an instructor may not be able to monitor each and every aspect of the individual's performance, particularly those aspects that are not easily monitored by merely observing the individual perform the repetitive motion. Another limitation is that for many, particularly for private or one-on-one-type instruction, hiring a professional instructor can be expensive or even cost prohibitive.

[0005] Visual recording or videotaping of the repetitive motion sequence for post-analysis by the individual or an instructor has also been used as a practicing aid. Although, this may be beneficial, it does not provide immediate feedback to allow the individual to adjust his or her performance accordingly during the practice session. Further, unless the individual is quite knowledgeable of the mechanics of a properly executed motion sequence, little benefit may be derived from such method without involvement of a coach or instructor who can point out the proper or improper aspects of the recorded motion sequence.

[0006] What is therefore needed is a method and a system for practicing repetitive motions that overcome many of the shortcomings of the aforementioned prior art methods.

## SUMMARY

[0007] The present invention, accordingly, provides a data processing method and a system for managing data describing each of a plurality of repetitive motions executed by a plurality of individuals at a plurality of bay stations located at a plurality of locations. The data is received by a data processing system via a communications network from each bay station, and is recorded in a data storage device. A request is received by the data processing system via the network from a requester at a terminal for a selected portion of the data, and the selected portion of the data is retrieved and transmitted via the network to the requester at the terminal.

## BRIEF DESCRIPTION OF THE DRAWINGS

[0008] For a more complete understanding of the present invention, and the advantages thereof, reference is now made to the following descriptions taken in conjunction with the accompanying drawings, in which:

[0009] **FIG. 1** is a high-level conceptual block diagram illustrating a communications network interconnecting components embodying features of the present invention;

[0010] **FIG. 2** is a schematic diagram which exemplifies a network computer which may be used to implement the network of **FIG. 1**;

[0011] **FIG. 3** is a schematic diagram of a membership card which may be used by a member participating in the system of **FIG. 1**;

[0012] **FIG. 4** is a high-level state diagram which depicts the operation of the system of **FIG. 1**;

[0013] FIGS. **5**A-**5**D are a flow chart which depicts control logic utilized by a software program in the computer of **FIG. 2** to implement the state diagram of **FIG. 4**;

[0014] **FIG. 6** is a flow chart illustrating control logic effective for enabling the network computer to acquire data describing a repetitive motion of a member;

[0015] **FIG. 7** is a flow chart illustrating control logic effective for enabling a member to access from the network computer data describing a repetitive motion of a member;

[0016] **FIG. 8** is a flow chart illustrating control logic effective for enabling a model repetitive motion to be designated as a repetitive motion template of a member;

[0017] **FIG. 9** is a flow chart illustrating control logic effective for enabling a member to remotely instruct the network computer to retrieve data describing a member's template repetitive motion;

[0018] **FIG. 10** is a flow chart illustrating control logic effective for enabling preferences to be entered for controlling the type of feedback a member receives when he practices repetitive motions;

[0019] **FIG. 11** flow charts illustrating control logic for generating and using statistical data from the data generated by members at bay stations to recommend equipment for members to use;

[0020] **FIG. 12** is a flow chart illustrating control logic for enabling members to compete with each other to determine which member practices closest to his/her repetitive motion template;

[0021] **FIG. 13** is a flow chart illustrating control logic for enabling members to compete with each other to determine which member improves the most;

[0022] **FIG. 14** is a flow chart illustrating control logic for enabling members to compete with each other to determine which member is most consistent in a repetitive motion;

[0023] **FIG. 15** is a flow chart illustrating control logic for enabling members to conduct a virtual competition with each other;

[0024] **FIG. 16** is a flow chart illustrating control logic for enabling instructors to review repetitive motions practiced by members;

[0025] **FIG. 17** is a flow chart illustrating control logic for instructors to determine their compensation; and

[0026] **FIG. 18** is a flow chart illustrating control logic for generating statistical data from the data generated by members at bay stations, for use by manufacturers.

## DETAILED DESCRIPTION

[0027] In the following discussion, numerous specific details are set forth to provide a thorough understanding of the present invention. However, it will be obvious to those skilled in the art that the present invention may be practiced without such specific details. In other instances, well-known elements have been illustrated in schematic or block diagram form in order not to obscure the present invention in unnecessary detail. Additionally, for the most part, details concerning computers, networks, and the like have been omitted inasmuch as such details are not considered necessary to obtain a complete understanding of the present invention, and are considered to be within the skills of persons of ordinary skill in the relevant art.

[0028] It is noted that, unless indicated otherwise, all functions described herein are performed by a processor such as a computer or electronic data processor in accordance with code such as computer program code, software, integrated circuits, and/or the like that are coded to perform such functions. Furthermore, it is considered that the design, development, and implementation details of all such code would be apparent to a person having ordinary skill in the art based upon a review of the present description of the invention.

[0029] It is further noted that the term "member" as used herein is understood to refer to an individual person, or the like, that engages or interacts with the present invention. Such member would preferably be a member of a business entity, such as a franchise or a club managed and operated by a franchise, which would establish, operate, and maintain the method and system of the present invention as described herein.

[0030] Referring to **FIG. 1** of the drawings, the reference numeral **100** generally designates a network system embodying features of the present invention. The system **100** includes a wireline and/or wireless communication network **102**, such as the Internet, an intranet, a local area network (LAN), a wide area network (WAN), T1 lines, satellites, or the like, or any combination thereof, effective for providing data communication between computers. As described in further detail below, connected to the network **102** is a data processing system, also referred to herein as a network server or network computer, **104**, a number of bay stations **106**. A number of members **110**, instructors **111**, and authorized persons **130** are also connected to the network **102** by way of remote terminals or computers **122**, **123**, and **131**, respectively, operable by the members **110**, instructors **111**, and authorized persons **130** (collectively referred to herein as "users 110, 111, and 130" or "user 110, 111, or 130").

[0031] Each bay station **106** includes a computer **114**, to which are connected a card reader **116**, at least one input device **118**, and at least one output device **120**. Each computer **114** is preferably connected to the network **102** for data communication with the network computer **104**. The card reader **116** may be any conventional card reader, such as a magnetic code reader, bar code scanner, or the like, effective for reading data imprinted on user cards **124**, **125**, and **132**, described further below with respect to **FIG. 3**. The computers **114** may be conventional computers, and are described in further detail in the co-pending '223 patent application.

[0032] Each of the bay stations **106** are configured for electronically monitoring a repetitive motion (wherein the term "repetitive motion" is used herein to include practice motions and sequences of repetitive motions), executed by a member **110**, and for generating data describing or representing the repetitive motion, as described in further detail in the co-pending '223 patent application. The generated data may include a video recording, three dimensional (3D) motion, laser monitored motion, weight shift patterns, and the like. The generated data is collected via the at least one input device **118** and recorded in the computer **114**. The computer **114** is provided with software (not shown) configured for processing the data, and for generating to the at least one output device **120**, substantially instantly upon completion of the motion, feedback to the member **110** who generated the motion. The at least one output device **120** may be any device effective for providing visual, audible, and/or electronic feedback, such as, for example, a monitor, speaker, printer, compact disc recorder, video recorder, and/or the like. The computer **114** is connected for transmitting the generated data (preferably unprocessed) via the network **102** to the network computer **104** for storage in a data storage device (described below).

[0033] A number, such as six or twelve, of the stations **106** are preferably grouped together at a site where repetitive motions are conventionally practiced, such as at a golf course. The computers **114** of the stations **106**, which are grouped together at a site, may optionally be electronically connected together via a LAN computer (not shown), for

backup recording of data, for the transmission of data from the computers **114** to the network computer **104** via the network **102**, and the like. Furthermore, multiple sites, which are preferably geographically separated, for example, in different cities or countries, or by a distance of more than a mile, are preferably each provided with one or more such groups of stations **106**.

[**0034**] It is understood that the stations **106** may be used for many purposes such as, for example, practicing and developing repetitive motions or, as described further below with respect to FIGS. **12-15**, facilitating repetitive motion competitions between members **110** at bay stations **106** located at a common site or different sites. The structure and operation of the individual stations **106** are described in further detail in the '223 co-pending patent application, is incorporated herein in its entirety by reference, and is, therefore, not described in further detail herein, except to the extent necessary to understand the present invention.

[**0035**] Each of the aforementioned groups of stations **106** is preferably owned and operated as a business entity, such as a modified franchise, wherein a franchise lessee leases space from a lessor, for a percentage of point-of-purchase revenues, space on site where such repetitive motions are practiced. In exchange for a fee and/or revenues from the lessor, the franchise provides facilities and equipment necessary for monitoring a member's repetitive motion in accordance with the present invention. As discussed further below, the franchise may optionally also be structured to receive and compile data from the plurality of stations **106**, and to make such data available to manufacturers in exchange for compensation, such as monetary funds, so that improved accessories, apparel, equipment, balls, and the like, used in executing repetitive motions may be made available to members **110** as well as non-members. The franchise structure would also facilitate virtual tournaments, competitions, and games between members that may be geographically separated by relatively great distances, such as would be the case with members in different cities, states, or even different countries. Monetary proceeds from virtual tournaments, competitions, and games between members would preferably be apportioned equally between franchise lessors, or alternatively, such monetary proceeds may be distributed unequally based, for example, on the number of stations that a lessor supports.

[**0036**] Each member **110** preferably possesses, or has access to, a remote terminal, or computer, **122**, such as a personal computer (PC), laptop computer, personal digital assistant (PDA), kiosk, and/or the like, which is connected to the network **102** for data communication with the network computer **104**. The computer **122** is preferably provided with a suitable graphical user interface (GUI) standalone software program configured for enabling it to interface with the network computer **104**, and process and save data it receives from the network computer **104**. Alternatively, the computer **122** may interface with the network computer **104** through a conventional web page supported by the network computer **104** using conventional techniques. The computer **122** may include output devices such as monitors, printers, CD recorders, and the like. The remote terminals, or computers, **122** may be located anywhere there is a connection to the network **102**, such as, but not limited to, a member's home residence. As used herein with respect to remote terminals, the term "remote" means that the terminal or computer is not located on the premises of a bay station **106** at which the member is located.

[**0037**] Each instructor **111** or authorized person **130**, also, preferably possesses, or has access to, a computer **123** or **131**, such as a PC, laptop computer, PDA, kiosk, and/or the like, which is connected to the network **102** for data communication with the network computer **104**. The computers **123** and **131** are preferably provided with a suitable graphical user interface (GUI) standalone software program configured for enabling it to interface with the network computer **104**, and process and save data it receives from the network computer **104**. The computers **123** and **131**, however, may be located either on or off the premises of a bay station **106**. The computers **123** and **131** may include output devices such as monitors, printers, CD recorders, and the like.

[**0038**] Each user **110**, **111**, and **131** is preferably also provided with a user account number, or personal identification number (PIN), for accessing the network computer **104**. Such PIN is preferably embedded onto a card, such as a member card **124** of a respective member **110**, an instructor card **125** of a respective instructor, or an authorized person card **132** of a respective authorized person, in both human-readable and machine-readable format, as described in further detail with respect to **FIG. 3**. Upon entry of the PIN through a computer **114**, **122**, **123**, or **131** and network **102** to the network computer **104**, a user **110**, **111**, or **130** acting as a "requester," may request data from the computer **104**, such requesters including, by way of example, the member who executed the repetitive motions represented by the data being requested, an instructor responsible for instructing the member who executed the repetitive motions represented by the data being requested, and/or an authorized person who **130** has permission to access the data.

[**0039**] **FIG. 2** is a schematic diagram depicting aspects of the network computer **104**. As shown therein, the computer **104** includes at least one conventional processor **200** (also referred to as a central processing unit (CPU) or arithmetic logic unit (ALU)), adapted for processing data received from the network **102**, for storing such data in records of a database, executing processes comprising application programs effective for managing database operations and other computers on the network **102**, and the like.

[**0040**] A memory, or data storage device, **202**, is operably connected to the processor **200**. The data storage device may be a semiconductor, magnetic, or optical memory device, and may include, but is not limited to, such devices as random access memory (RAM), floppy disks, fixed or hard disks, optical discs (e.g., CDs and DVDs), magnetic tapes, and the like, effective for storing data in a manner that is well known to those skilled in the art. Data may be collected and stored continuously or, alternatively, only selected data may be stored during a practice session or performance of a repetitive motion sequence. The selected data may be stored or saved at the direction of the individual or an observer or instructor or upon the occurrence of an event, such as a particular monitored event.

[**0041**] As discussed in further detail below, the memory **202** is preferably apportioned between at least one executable program **204**, a database **206**, a state register **208**, and an event register **210**. While not shown, the database **206** may, optionally, be further apportioned between a index

database and a raw data database. Such index database would store data relating to a particular repetitive motion, such as the name of the member that executed the motion, the bay the motion was executed in, the date and time the motion was executed. The raw data database would store information pertaining to data actually describing or representing the motion indexed in the index database. The data in the raw data database would be accessible by members, instructors, administrators, and manufacturers and could be used when conducting repetitive motion competitions.

[0042] A conventional interface **212** is connected to the processor **200** for providing an interface between the processor **200** and the network **102**. The computer **104** may constitute a network server computer, and may be used to maintain a web page (not shown) through the network **102** for members and/or instructors to access selected data and information.

[0043] Referring to **FIG. 3, a** member card **124** is exemplified as preferably containing a machine-readable code **302** representing a PIN of the card holder member, the PIN being imprinted on the card in a conventional format, such as bar code, magnetic code, or the like, which is readable by a card reader **116**. The member card **124** preferably also includes, imprinted in human-readable format at two fields **304** and **306** on the card, the name and PIN, respectively, of the member. Optionally, the card **124** may also include an expiration date (not shown), beyond which date the member card **124** is invalid. Each instructor **111** and authorized person **130** is provided with a card **125** and **132**, respectively, which is substantially similar to the member card **124**.

[0044] **FIG. 4** shows a representative high-level state diagram **400** which depicts states through which an individual person may pass during and subsequent to becoming a registered person, such as a member **110**, instructor **111**, or authorized person **130**, of the aforementioned organization implementing the present invention, in accordance with one preferred embodiment of the present invention. While described herein with respect to an individual member **110**, the states depicted in **FIG. 4** may be experienced by each of any number of users **110**, **111**, or **130**.

[0045] As shown in **FIG. 4** and described in further detail below, an individual who is not a member may pass through a MEMBERSHIP-REGISTRATION state **402**, wherein the individual acquires membership in the organization, an ACTIVITY state **404** in which a member **110** may engage in a number of different transactional activities, and a MEMBERSHIP-TERMINATION state **406** in which the member's membership is terminated. As will be described in greater detail below, during the ACTIVITIES state **404**, each of at least twelve activities may be performed any number of times, in any sequence, and are tabulated as follows, in no particular sequence:

| Ref. | FIG. | State |
|---|---|---|
| 408 | 6 | DATA-ACQUISITION |
| 410 | 7 | DATA-ACCESS |
| 412 | 8 | TEMPLATE-DESIGNATION |
| 414 | 9 | REMOTE-DELTA-COMPARE |
| 416 | 10 | FEEDBACK-PROFILE |
| 418 | 11 | MEMBER-EQMT-RECOMMENDATION |

-continued

| Ref. | FIG. | State |
|---|---|---|
| 420 | 12 | LEAST-DELTA-COMPETITION |
| 422 | 13 | IMPROVEMENT-COMPETITION |
| 424 | 14 | CONSISTENCY-COMPETITION |
| 426 | 15 | VIRTUAL-COMPETITION |
| 428 | 16–17 | INSTRUCTOR-DATA-SALES |
| 430 | 18 | EQMT-MFR-DATA |

[0046] FIGS. **5**A-**5**D illustrate a representative high-level flowchart **500** of control logic utilized by the executable program **204** (**FIG. 2**) for implementing the state diagram **400** shown in **FIG. 4**, with respect to one user **110**, **111**, or **130** in accordance with a preferred embodiment of the present invention. The control logic is initiated by interrupt requests (IRQs) and conventional Internet web page technology, well-known in the art and, therefore, not discussed in further detail herein. It is noted that, as used in FIGS. **4**-**5**D, the term "state" includes events which may occur during a state, and/or trigger the beginning and/or end of a state, for which events the event register **210** would be utilized in a manner well-known in the art.

[0047] In **FIG. 5**A, execution of the program **204** is initiated in step **501** and proceeds to step **502** wherein a determination is made whether the state register **208** or event register **210** is set to the REGISTRATION-INITIATION state or to an event therein. If it is determined that the register **208** or **210** is set to the REGISTRATION-INITIATION state or event, then execution enters the REGISTRATION-INITIATION state **402**, wherein conventional events (not shown), such as completing membership, instructor, or authorized person application forms and paying membership fees, are executed. Upon completion of events constituting the REGISTRATION-INITIATION state **402**, execution proceeds to step **508**. If, in step **502**, it is determined that the register **208** or **210** is not set to the REGISTRATION-INITIATION state or event, then execution proceeds directly to step **508**.

[0048] In step **508**, a determination is made whether the state register **208** or event register **210** is set to the DATA-ACQUISITION-TX state or to an event therein. If it is determined that the register **208** or **210** is set to the DATA-ACQUISITION-TX state or to an event therein, then execution enters the DATA-ACQUISITION-TX state **408**, described in further detail below with respect to **FIG. 6**. Upon completion of events constituting the DATA-ACQUISITION-TX state **408**, execution proceeds to step **510**. If, in step **508**, it is determined that the register **208** or **210** is not set to the DATA-ACQUISITION-TX state or to an event therein, then execution proceeds directly to step **510**.

[0049] In step **510**, a determination is made whether the state register **208** or event register **210** is set to the DATA-ACCESS state or to an event therein. If it is determined that the register **208** or **210** is set to the DATA-ACCESS state or to an event therein, then execution enters the DATA-ACCESS state **410**, described in further detail below with respect to **FIG. 7**. Upon completion of events constituting the DATA-ACCESS state **410**, execution proceeds to step **512**. If, in step **510**, it is determined that the register **208** or **210** is not set to the DATA-ACCESS state or to an event therein, then execution proceeds directly to step **512**.

[0050] In step **512**, a determination is made whether the state register **208** or event register **210** is set to the TEMPLATE-DESIGNATION state or to an event therein. If it is determined that the register **208** or **210** is set to the TEMPLATE-DESIGNATION state or to an event therein, then execution enters the TEMPLATE-DESIGNATION state **412**, described in further detail below with respect to **FIG. 8**. Upon completion of events constituting the TEMPLATE-DESIGNATION state **412**, execution proceeds to step **514**. If, in step **512**, it is determined that the register **208** or **210** is not set to the TEMPLATE-DESIGNATION state or to an event therein, then execution proceeds directly to step **514**.

[0051] With reference to **FIG. 5**B, in step **514**, a determination is made whether the state register **208** or event register **210** is set to the REMOTE-DELTA-COMPARE state or to an event therein. If it is determined that the register **208** or **210** is set to the REMOTE-DELTA-COMPARE state or to an event therein, then execution enters the REMOTE-DELTA-COMPARE state **414**, described in further detail below with respect to **FIG. 9**. Upon completion of events constituting the REMOTE-DELTA-COMPARE state **414**, execution proceeds to step **516**. If, in step **514**, it is determined that the register **208** or **210** is not set to the REMOTE-DELTA-COMPARE state or to an event therein, then execution proceeds directly to step **516**.

[0052] In step **516**, a determination is made whether the state register **208** or event register **210** is set to the FEEDBACK-PROFILE state or to an event therein. If it is determined that the register **208** or **210** is set to the FEEDBACK-PROFILE state or to an event therein, then execution enters the FEEDBACK-PROFILE state **416**, described in further detail below with respect to FIG. **10**. Upon completion of events constituting the FEEDBACK-PROFILE state **416**, execution proceeds to step **518**. If, in step **516**, it is determined that the register **208** or **210** is not set to the FEEDBACK-PROFILE state or to an event therein, then execution proceeds directly to step **518**.

[0053] In step **518**, a determination is made whether the state register **208** or event register **210** is set to the MEMBER-EQMT-RECOMMENDATION state or to an event therein. If it is determined that the register **208** or **210** is set to the MEMBER-EQMT-RECOMMENDATION state or to an event therein, then execution enters the MEMBER-EQMT-RECOMMENDATION state **418**, described in further detail below with respect to **FIG. 11**. Upon completion of events constituting the MEMBER-EQMT-RECOMMENDATION state **418**, execution proceeds to step **520**. If, in step **518**, it is determined that the register **208** or **210** is not set to the MEMBER-EQMT-RECOMMENDATION state or to an event therein, then execution proceeds directly to step **520**.

[0054] In step **520**, a determination is made whether the state register **208** or event register **210** is set to the LEAST-DELTA-COMPETITION state or to an event therein. If it is determined that the register **208** or **210** is set to the LEAST-DELTA-COMPETITION state or to an event therein, then execution enters the LEAST-DELTA-COMPETITION state **420**, described in further detail below with respect to **FIG. 12**. Upon completion of events constituting the LEAST-DELTA-COMPETITION state **420**, execution proceeds to step **522**. If, in step **520**, it is determined that the register **208** or **210** is not set to the LEAST-DELTA-COMPETITION state or to an event therein, then execution proceeds directly to step **522**.

[0055] In step **522**, a determination is made whether the state register **208** or event register **210** is set to the IMPROVEMENT-COMPETITION state or to an event therein. If it is determined that the register **208** or **210** is set to the IMPROVEMENT-COMPETITION state or to an event therein, then execution enters the IMPROVEMENT-COMPETITION state **422**, described in further detail below with respect to **FIG. 13**. Upon completion of events constituting the IMPROVEMENT-COMPETITION state **422**, execution proceeds to step **524**. If, in step **522**, it is determined that the register **208** or **210** is not set to the IMPROVEMENT-COMPETITION state or to an event therein, then execution proceeds directly to step **524**.

[0056] With reference to **FIG. 5**C, in step **524**, a determination is made whether the state register **208** or event register **210** is set to the CONSISTENCY-COMPETITION state or to an event therein. If it is determined that the register **208** or **210** is set to the CONSISTENCY-COMPETITION state or to an event therein, then execution enters the CONSISTENCY-COMPETITION state **424**, described in further detail below with respect to **FIG. 14**. Upon completion of events constituting the CONSISTENCY-COMPETITION state **424**, execution proceeds to step **526**. If, in step **524**, it is determined that the register **208** or **210** is not set to the CONSISTENCY-COMPETITION state or to an event therein, then execution proceeds directly to step **526**.

[0057] In step **526**, a determination is made whether the state register **208** or event register **210** is set to the VIRTUAL-COMPETITION state or to an event therein. If it is determined that the register **208** or **210** is set to the VIRTUAL-COMPETITION state or to an event therein, then execution enters the VIRTUAL-COMPETITION state **426**, described in further detail below with respect to **FIG. 15**. Upon completion of events constituting the VIRTUAL-COMPETITION state **426**, execution proceeds to step **527**. If, in step **526**, it is determined that the register **208** or **210** is not set to the VIRTUAL-COMPETITION state or to an event therein, then execution proceeds directly to step **527**.

[0058] In step **527**, a determination is made whether the state register **208** or event register **210** is set to the INSTRUCTOR-DATA state or to an event therein. If it is determined that the register **208** or **210** is set to the INSTRUCTOR-DATA state or to an event therein, then execution proceeds to step **528** wherein a determination is made whether the user or person requesting the instructor data is authorized to access such data. If a determination is made that such user or person is authorized to access such data, then execution enters the INSTRUCTOR-DATA state **428**, described in further detail below with respect to FIGS. **16-17**. Upon completion of events constituting the INSTRUCTOR-DATA state **428**, execution proceeds to step **530**. If, in steps **527** or **528**, it is determined that the register **208** or **210** is not set to the INSTRUCTOR-DATA state or to an event therein or that access is not authorized, then execution proceeds directly to step **529**.

[0059] With reference to **FIG. 5**D, in step **529**, a determination is made whether the state register **208** or event register **210** is set to the EQMT-MFR-DATA state or to an

event therein. If it is determined that the register **208** or **210** is set to the EQMT-MFR-DATA state or to an event therein, then execution proceeds to step **530** wherein a determination is made whether the user or person requesting the equipment-manufacturer data is authorized to access such data. If a determination is made that such user or person is authorized to access such data, then execution enters the EQMT-MFR-DATA state **430**, described in further detail below with respect to **FIG. 18**. Upon completion of events constituting the EQMT-MFR-DATA state **430**, execution proceeds to step **532**. If, in steps **529** or **530**, it is determined that the register **208** or **210** is not set to the EQMT-MFR-DATA state or to an event therein or that access is not authorized, then execution proceeds directly to step **532**.

[**0060**] In step **532**, a determination is made whether the state register **208** or event register **210** is set to the REGISTRATION-TERMINATION state or to an event therein. If it is determined that the register **208** or **210** is set to the REGISTRATION-TERMINATION state, then execution enters the REGISTRATION-TERMINATION state **406**, wherein conventional events, such as providing written notice by the user to the organization operating the bay stations, or by the organization to the user, are submitted to effect termination. Upon completion of events constituting the REGISTRATION-TERMINATION state **406**, execution of the flow chart **500** for a respective user **111**, or **130** terminates. If, in step **532**, it is determined that the register **208** is not set to the REGISTRATION-TERMINATION state, then execution returns to step **502**.

[**0061**] FIGS. **6-18** are flow charts of preferred control logic implemented by the network computer **102**, bay stations **106**, and members **110**, instructors **111**, and authorized persons **130** for executing messaging and event (e.g., step) sequences between the computers, stations, members, instructors, and authorized persons according to principles of the present invention. It should be noted, however, that in alternative embodiments, the sequencing of events or steps may differ. It should be further noted that references in FIGS. **6-18** to the station **106**, members **110**, instructors **111**, and authorized persons **130** include the respective computers **114**, **122**, **123**, and **131**, and that events which transpire between such computers occur through the network **102**.

[**0062**] It is understood that, while not described for each state, each state includes, as a preliminary step, the establishment of a data communication connection between the network computer **104** and a computer **114**, **122**, **123**, and/or **131**. Such data communication connection is preferably established via the network **102** using a suitable graphical user interface (GUI) standalone software program resident on the computer **114**, **122**, **123**, and/or **131**. Alternatively, such data communication connection may be established via the network **102** using any other suitable means, such as a prompt-driven web page interface. Authorization for access to data on the network computer **104** may also be obtained upon submission of member's identification account number **306**.

[**0063**] **FIG. 6** is a flow chart which depicts events which transpire during the DATA-ACQUISITION state **408**. In step **602**, after a member makes an appointment to use a bay station **106**, the bay station generates a message to retrieve a member's model template data (discussed below). In step **604**, the message is transmitted to the network computer **104**, preferably at least 24 hours prior to the member's appointment. In step **606**, the message is received by the network computer **104** and, in step **608**, the requested template data is retrieved from the database **206**. In step **610**, the data is transmitted to the bay station **106** and, in step **612**, the data is received by the computer **114** of the bay station **106** and stored for use by the member at the appointed time.

[**0064**] In step **614**, at the time of the member's appointment, the member **110** swipes his/her card with the PIN through the card reader **116** or, alternatively, manually enters his/her PIN into the computer **114**, and the computer **114** verifies that the member is the member having the appointment. In step **616**, the member executes a repetitive motion, and the input device **118** monitors the motion and generates data describing the motion, in accordance with the co-pending '223 patent application. The input device **118** then transmits the generated data to the computer **114** which then records the data in the computer **114**. In step **618**, the generated data is processed as desired. For example, the data may be compared against the member's template to generate differences, or deltas, between the member's executed motion and the member's template. In step **620**, the processed data are presented to the member, such as via display on a video screen. In step **622**, a determination is made whether the member will execute an additional repetitive motion. If it is determined that the member will execute an additional motion, then execution returns to step **616**; otherwise, execution proceeds to step **624**. In step **624**, upon completion of the member's appointed time, the (preferably unprocessed) data recorded in step **616** is transmitted from bay station **106** via the network **102** to the network computer **104**. In step **626**, the data is received by the network computer **104** and, in step **628**, the network computer **104** records the received data in the database **206**.

[**0065**] **FIG. 7** is a flow chart which depicts events which transpire during the DATA-ACCESS state **410**. In step **702**, a user **110**, **111**, or **130** desirous of accessing (and authorized to access) data describing repetitive motions, utilizes his/her respective computer **122**, **123**, or **131** in a conventional manner to generate a request message to retrieve such data. The message may also include a request for the member's template data. In step **704**, the member's PIN (e.g., account number) **306** is preferably automatically appended to the request message, though the PIN may be manually appended thereto. In step **706**, the request message is transmitted via the network **102** to the network computer **104**, and in step **708**, the network computer receives the message. In step **710**, the network computer **104** retrieves the requested data from the database **206**. In step **712**, the requested data is transmitted from the network computer **104** via the network **102** to the computer **122**, **123**, or **131** and in step **714**, the member computer **122** receives the message. In step **716**, the computer **122**, **123**, or **131** processes the data (e.g., determines deltas between the member's template and requested motion data) and presents (e.g., displays on a monitor) the data to the user **110**, **111**, or **130**.

[**0066**] **FIG. 8** is a flowchart of control logic implemented by the network computer **104** during the TEMPLATE-DESIGNATION state **412** (**FIG. 4**) for identifying a model motion in a station **106**, and designating such model motion as a motion template in accordance with principles of the present invention. Accordingly, execution is initiated in step **802**, at a station **106**, a member's computer **122**, an instruc-

tor's computer **123**, o ran authorized person's computer **131** wherein preferably an instructor **111** of a member **110** having a particular member number **306**, or alternatively the member him/herself, identifies a repetitive motion executed by the member **110** as a model repetitive motion for the member. In step **804**, the identified model motion is designated through the computer **114**, **122**, **123**, or **131** as a model motion template. In step **806**, the computer **114**, **122**, **123**, or **131** is directed by the member **110** or instructor **111** to generate a message associating the model motion template with the member **110** having the particular member number **306**. In step **808**, the message is transmitted via the network **102** to the network computer **104**, and in step **810**, the message is received by the network computer **104**. In step **812**, the data associating the model motion template with the member **110** having the particular member number **306** is recorded in the database **206**.

[**0067**] **FIG. 9** is a flowchart of control logic implemented by the network computer **104** during the REMOTE-DELTA-COMPARE state **414** **(FIG. 4)** for comparing differences, or deltas, between a member's executed repetitive motion and a member's model motion template, while not at a bay station **106**, in accordance with the present invention. Accordingly, in step **902**, a user **110**, **111**, or **130** having a particular PIN **306** and located at a remote terminal, or computer, **122**, **123**, or **131** accesses the network computer **104** in a conventional manner to generate a message requesting that the network computer **104** retrieve from the database **206** data describing a repetitive motion that the member **110** executed, and data describing the member's model motion template. The repetitive motion may or may not have been executed at the same station **106** that the template was generated from. In step **904**, the request message is transmitted via the network **102** to the network computer **104**, and in step **906**, the message is received by the network computer **104**. In step **908**, the network computer **104** retrieves from the database **206** data necessary to execute request. In step **910**, the network computer **104** generates a response message responding to the request message received in step **906** comprising the requested data. In step **912**, the response message is transmitted from the network computer via the network **102** to the computer **122** or **123**, and in step **914**, the response message is received by the computer **122** or **123**. In step **916**, the computer **122** or **123** processes the data to compare the executed repetitive motion requested by the member **110** against the member's motion template to determine at least one delta between the motion template and the executed repetitive motion motion of the member **110**.

[**0068**] **FIG. 10** is a flowchart of control logic implemented by the network computer **104** during the FEEDBACK-PROFILE state **416** **(FIG. 4)** for entering feedback profiles effective for indicating to the network computer **104** the type of feedback a member should receive after executing a repetitive motion, in accordance with the present invention. Accordingly, in step **1002**, a member **110** or an instructor **111** enters into a computer **114**, **122**, or **123**, data indicating the type of feedback a member should receive after executing a repetitive motion. The computer **114**, **122**, or **123** processes the data to generate a feedback profile for the member, which profile includes the member identification number of the member. By way of example, the feedback profile may indicate whether the member wishes to receive audible feedback, visual feedback, positive feedback, negative feedback, feedback only when doing something incorrectly, feedback only with respect to selected aspects of a repetitive motion, and/or the like. In step **1004**, the computer **114**, **122**, **123**, or **131** generates a message comprising the feedback profile of the member. In step **1006**, the feedback profile message is transmitted via the network **102** to the network computer **104**, and in step **1008**, the feedback profile message is received by the network computer **104**. In step **1010**, the network computer **104** records the feedback profile for providing subsequent feedback to the member identified by the member's identification number.

[**0069**] **FIG. 11** is a flowchart of control logic implemented by the network computer **104** during the MEMBER-EQMT-RECOMMENDATION state **428** **(FIG. 4)** for generating recommendations of equipment that a member **110** should use to improve his/her game, in accordance with one embodiment of the present invention. Accordingly, execution of the program **204** is initiated in step **1102** and, in step **1104**, data is compiled from a plurality of members to generate statistical data regarding equipment, including accessories, apparel, and/or balls, used in the execution of the repetitive motions. The statistical data is recorded in the computer memory **202**. Such statistical data may include, but is not limited to, the effect of certain brands and models of various equipment for enhancing performance for certain types of members in certain types of circumstances. In step **1106**, data from repetitive motions executed by a particular member **110** is compiled and, from the compiled data, statistical data is generated, using conventional methods, in a manner effective for determining what type of equipment would most enhance performance of the particular member **110**. In step **1108**, the statistical data generated in step **1106** for the particular member **110** is compared against the statistical data generated in step **1104** for the plurality of members using conventional techniques to generate a recommendation of what brand and model of equipment, including accessories, apparel, and balls, would most enhance the repetitive motion performance of the particular member **110**. The program **204** is terminated with respect to the MEMBER-EQMT-RECOMMENDATION state **418** in step **1110**.

[**0070**] FIGS. **12-15** depict competitions that may be held between members **110** who may be diversely located at the same or different bay stations **106**. For example, one member at one bay station **106** may compete with other members at the same or other bay stations located in a same or different city, state, or country.

[**0071**] **FIG. 12** is a flowchart of control logic implemented by the network computer **104** during the LEAST-DELTA-COMPETITION state **420** **(FIG. 4)** for conducting a competition between selected members **110**, in accordance with one embodiment of the present invention. Accordingly, the competition is initiated in step **1202** and, in step **1204**, a group of members **110** are identified who are interested in competing to determine which member practices a repetitive motion closest to a member's respective model motion template, and their respective member identification numbers are entered into the network computer **104**. In step **1206**, the network computer **104** retrieves from the database **206**, data representing each member's most recently executed repetitive motion, and compares the executed repetitive motion against the member's respective model

motion template to determine at least one delta between the executed repetitive motion and the template. While the executed repetitive motion may be selected based on which practice is the most recent, other suitable criteria may used, such as a member's best of a predetermined number (e.g., ten) of the most recently executed repetitive motions, or a member's average executed repetitive motion of a predetermined number (e.g., ten) of the most recently executed repetitive motions, or the like. Alternatively, the deltas may be determined for each of the executed repetitive motions, and the statistical average, mean, or the like, may be determined for the competition. In another alternative, rather than retrieve data representing past executed repetitive motions, each competing member may be required to execute a repetitive motion for competition at a designated point in time. Upon completion of the comparison and delta determination in step **1206**, execution proceeds to step **1208** in which the deltas for each member are compared, and in which the member having the least delta is identified as the winner of the competition to practice closest to the member's respective motion template. In step **1210**, a prize, such as recognition, a monetary prize, and/or the like, may optionally be awarded to the winner. In step **1212**, the competition is terminated.

[**0072**] **FIG. 13** is a flowchart of control logic implemented by the network computer **104** during the IMPROVEMENT-COMPETITION state **422 (FIG. 4)** for conducting a competition between selected members **110** to determine which member has improved the most, in accordance with one embodiment of the present invention. Accordingly, the competition is initiated in step **1302** and, in step **1304**, a group of members **110** are identified who are interested in competing to determine which member has most improved his/her repetitive motion, and their respective member PINs are entered into the network computer **104**. In step **1306**, the network computer **104** retrieves from the database **206** for each member **110** in the group, data representing a first delta (i.e., from template) of a member's executed repetitive motion at a first point in time. In step **1308**, the network computer **104** retrieves from the database **206** for each member **110** in the group, data representing a second delta of a member's repetitive motion executed at a second, subsequent, point in time. In step **1310**, the decrease from the first delta to the second delta is calculated for each member **110**. While the repetitive motions may be selected at two points in time, repetitive motions may be selected from a predetermined number (e.g., ten) points in time, and the improvement, or decrease in deltas, of each member **110** calculated using conventional statistical methods. In step **1312**, the deltas of the competing members **110** are compared to identify the member having the greatest decrease as the winner of the competition to determine which member **110** has improved the most. In step **1314**, a prize, such as recognition, a monetary prize, and/or the like, may optionally be awarded to the winner. In step **1316**, the improvement competition is terminated.

[**0073**] **FIG. 14** is a flowchart of control logic implemented by the network computer **104** during the CONSISTENCY-COMPETITION state **424 (FIG. 4)** for conducting a competition between selected members **110** to determine which member is the most consistent with his/her repetitive motions, in accordance with one embodiment of the present invention. Accordingly, the competition is initiated in step **1402** and, in step **1404**, a group of members **110** are identified who are interested in competing to determine which member practices their repetitive motion most consistently, and their respective member PINs are entered into the network computer **104**. In step **1406**, the network computer **104** retrieves from the database **206**, data from each of a selected plurality of points in time for each member of the group, and compares at least one respective repetitive motion against a respective motion template to determine at least one respective delta between the respective motion template and the respective executed repetitive motion, thereby establishing a sequence of deltas for each member of the group. In step **1408**, the network computer **104** determines for each member of the group a respective variance of respective sequence of deltas, using conventional statistical methods. In step **1410**, the member having the least variance is identified as the most consistent practicing member of the plurality of members. In step **1412**, a prize, such as recognition, a monetary prize, and/or the like, may optionally be awarded to the winner. In step **1414**, the improvement competition is terminated.

[**0074**] **FIG. 15** is a flowchart of control logic implemented by the network computer **104** during the VIRTUAL-COMPETITION state **426 (FIG. 4)** for conducting a virtual competition between selected members **110**, in accordance with one embodiment of the present invention. Accordingly, the competition is initiated in step **1502** and, in step **1504**, a group of members **110** are identified who are interested in competing to determine which member practices a repetitive motion with the best performance results (e.g., which member hits a golf ball the furthest and/or most accurately), and their respective member PINs are entered into the network computer **104**. In step **1506**, the network computer **104** retrieves from the database **206** for each member **110**, data representing a member's most recently executed repetitive motion and the performance results of the repetitive motion. While the repetitive motion may be selected based on which practice is the most recent, other suitable criteria may used, such as a member's best of a predetermined number (e.g., ten) of the most recently executed repetitive motions, or a member's average repetitive motion performance of a predetermined number (e.g., ten) of the most recently executed repetitive motions, or the like. Alternatively, rather than retrieve data representing past executed repetitive motions, each competing member may be required to execute a repetitive motion for competition sequentially or in real time, e.g., during a predetermined period of time, such as within a specified 24 hour period. The execution of the repetitive motions may be made against an electronically simulated overlay of a real environment in which such motion would typically be made. For example, in the case of repetitive motions such as golf swings, the execution of the repetitive motions may be made against an overlay of an actual or simulated golf course. Upon obtaining the performance results in step **1506**, execution proceeds to step **1508** in which the performance results for each member are compared, one against the other. In step **1510**, the member having the best performance results is identified as the winner of the virtual competition. In determining the best performance results, handicaps may also be considered and accounted for. In step **1512**, a prize, such as recognition, a monetary prize, and/or the like, may optionally be awarded to the winner. In step **1514**, the virtual competition is terminated.

[0075] **FIG. 16** is a flowchart of control logic implemented by the network computer **104** during a first of two INSTRUCTOR-DATA states **428 (FIG. 4)** for enabling an instructor **111** of one or more members to review past repetitive motions executed by the one or more members, in accordance with one embodiment of the present invention. Accordingly, the control logic is initiated at step **1602**, which may result from the instructor **111** accessing the network computer **104** via the computer **123** or **114**. In step **1604**, data, including 3D models and/or video data, generated over a period of time (e.g., since a respective member's last training lesson with the instructor), preferably selected by the instructor, is retrieved from the database **206**. In step **1606**, the data is processed to generate statistical data, using conventional methods, in a form that is effective for an instructor **111** of the one or more members **110** to analyze how well each member is developing his/her repetitive motion. In step **1608**, the statistical data, along with 3D models and/or video data, is presented to the instructor **111** to assist the instructor **111** in analyzing the member's progress since a last training lesson, and to aid the instructor **111** in knowing what to emphasize in a next training lesson. In step **1610**, the first of two instructor states is terminated.

[0076] **FIG. 17** is a flowchart of control logic implemented by the network computer **104** during a second of two INSTRUCTOR-DATA states **428 (FIG. 4)** for determining how to compensate an instructor **111**, in accordance with one embodiment of the present invention. Accordingly, the control logic is initiated at step **1702**, which may result from the instructor **111** accessing the network computer **104** via the computer **123** or **114**. In step **1704**, a determination is made of the number of times all members **110** instructed by an instructor **111** have practiced their repetitive motions since a selected time. By way of example, such selected time may be designated as the last time each respective member **110** received a lesson from the instructor **111**, or the last time the instructor was compensated, or the like. In step **1706**, a compensation amount is determined for the instructor based on the number of practices calculated in step **1704**. Such calculation may be based on a fixed amount of compensation per practice, a varying amount per practice depending on how many practices were executed, or the like. The compensation may be in the form of monetary funds, credits that may be applied toward purchases, or the like. The program **204** is terminated with respect to the INSTRUCTOR-DATA state **428** in step **1708**.

[0077] **FIG. 18** is a flowchart of control logic implemented by the network computer **104** during the EQMT-MFR-DATA state **430 (FIG. 4)** for generating data useful to manufacturers for enhancing the effectiveness of repetitive motion equipment, apparatuses, and/or clothes they manufacture, in accordance with one embodiment of the present invention. Accordingly, the control logic is initiated at step **1802**, which may result from an authorized person, which may optionally include the manufacturer, accessing the network computer **104** via the network **102**. In step **1804**, data is compiled from a plurality of members to generate statistical data regarding equipment, including accessories, apparel, and/or balls, used in the execution of the repetitive motions. In step **1806**, the statistical data is recorded in the computer memory **202**. Such statistical data may include, but is not limited to, the effect of certain brands and models of various equipment for enhancing performance for certain types of members in certain types of circumstances.

[0078] In step **1808**, a determination is made whether a particular manufacturer has compensated (e.g., in monetary funds) the organization operating the network computer **104** for statistical data. If it is determined that a particular manufacturer has compensated the organization for statistical data, then execution proceeds to step **1810**, wherein the statistical data is provided to the particular manufacturer; otherwise, execution proceeds to step **1812**.

[0079] In step **1812**, a determination is made whether a particular manufacturer has compensated (e.g., in monetary funds) the organization operating the network computer **104** for including the particular manufacturer as a brand to recommend in step **1108** or **FIG. 11**. If it is determined that a particular manufacturer has so compensated the organization, then execution proceeds to step **1814**, wherein the particular manufacturer's brand is registered as a brand to recommend; otherwise, execution proceeds to step **1816**, wherein execution is terminated. Upon completion of step **1814**, execution proceeds to step **1816**.

[0080] Any compensation received from manufacturers may optionally be distributed to the bay stations **106**. Such optional distribution may be based upon any agreed-upon type of distribution, such as an equal portion of monetary funds to each station **106**, or a portion of the monetary funds may be distributed to each station based on the number of members that use each station, or the number of repetitive motions executed at each station **106**.

[0081] By the use of the present invention, individuals may develop and improve repetitive motion sequences much more efficiently than is possible using conventional techniques. The method of the present invention also permits individuals to review their progress at any location where they are able to connect to the network, (such as the Internet), and to compete with other individuals in remote locations without traveling. The structure of the present invention also enables stations to benefit financially, and for equipment manufacturers to improve their products, in ways not possible using conventional techniques.

[0082] It is understood that the present invention may take many forms and embodiments. Accordingly, several variations may be made in the foregoing without departing from the spirit or the scope of the invention. For example, with respect to a game of golf, a video screen may be provided in a bay station **106** which would display a virtual golf course simulating a real golf course selected from anywhere in the world. Using the data generated at the bay station **106**, the computer **114** could simulate the path a golf ball over the topography of the course, and overlay the path of the ball over the golf course on the screen. Such virtual overlay could be used in competition also. In an example relating to competitions, a web page may be provided comprising a leader board identifying the standing of each member **110** participating in a competition conducted in accordance with the present invention, such as depicted in FIGS. **12-15**).

[0083] Having thus described the present invention by reference to certain of its preferred embodiments, it is noted that the embodiments disclosed are illustrative rather than limiting in nature and that a wide range of variations, modifications, changes, and substitutions are contemplated in the foregoing disclosure and, in some instances, some features of the present invention may be employed without a corresponding use of the other features. Many such varia-

tions and modifications may be considered obvious and desirable by those skilled in the art based upon a review of the foregoing description of preferred embodiments. Accordingly, it is appropriate that the appended claims be construed broadly and in a manner consistent with the scope of the invention.

**1**. A method for managing data describing each of a plurality of repetitive motions executed by a plurality of individuals at a plurality of repetitive motion stations located at a plurality of locations, the method comprising the steps of:

receiving the data via a network from each of the plurality of stations;

recording the data in a data storage device;

receiving via the network from a requester at a remote terminal a request for a selected portion of the data; and

transmitting via the network to the requester at the remote terminal the selected portion of the data.

**2**. The method of claim 1 wherein the requester is at least one of the individuals who executed the repetitive motions, at least one instructor responsible for instructing the individual who executed the repetitive motions, and another individual who has permission to access the data.

**3**. The method of claim 1 wherein the network comprises at least one of the Internet, an intranet, a local area network (LAN), a wide area network (WAN), a T1 line, and satellite communication.

**4**. The method of claim 1 wherein requester is the individual who executed the repetitive motions, the network comprises at least one of the Internet, an intranet, a local area network (LAN), a wide area network (WAN), a T1 line, and satellite communication, and the individual is requesting the data from a computer terminal located at the individual's residential home.

**5**. The method of claim 1 wherein the repetitive motions include at least one of a previous motion executed by the individual, a motion template executed by the individual, and a motion generated by an expert.

**6**. The method of claim 1 further comprising:

designating for a selected individual a model motion to be a motion template for the selected individual;

recording the template in the data storage device; and

comparing repetitive motions of the selected individual against the motion template to determine at least one delta between the motion template and the executed repetitive motion.

**7**. The method of claim 1 wherein the plurality of stations include at least two stations geographically separated from each other.

**8**. The method of claim 1 further comprising:

designating for a selected individual a model motion executed by the individual at a first station at a first location to be a motion template for the selected individual;

recording the motion template in the data storage device;

executing a repetitive motion by the selected individual at a second station at a second location separated from the first station at the first location; and

comparing executed repetitive motions of the selected individual at the second station at the second location against the motion template to determine at least one delta between the motion template and the executed repetitive motion.

**9**. The method of claim 1 further comprising:

designating for a selected individual a model motion to be a motion template for the selected individual;

recording the motion template in the data storage device;

comparing a executed repetitive motion of the selected individual against the motion template to determine at least one delta between the motion template and the executed repetitive motion; and

providing feedback describing the at least one delta to the selected individual.

**10**. The method of claim 1 further comprising:

designating for a selected individual a model motion to be a motion template for the selected individual;

recording the motion template in the data storage device;

comparing an executed repetitive motion of the selected individual against the motion template to determine at least one delta between the motion template and the executed repetitive motion;

developing an individual feedback profile; and

providing feedback in accordance with the individual feedback profile describing the at least one delta to the selected individual.

**11**. The method of claim 1 further comprising:

designating for a selected individual a model motion to be a motion template for the selected individual;

recording the motion template in the data storage device;

comparing an executed repetitive motion of the selected individual against the motion template to determine at least one delta between the motion template and the executed repetitive motion;

developing an individual feedback profile indicating individual preference for the presence or absence of at least one of positive feedback, negative feedback, visual feedback, audible feedback, verbal feedback, one or more selected aspects of executed repetitive motion, and time of the executed repetitive motion; and

providing feedback in accordance with the individual feedback profile describing the at least one delta to the selected individual.

**12**. The method of claim 1 further comprising determining a monetary amount to pay to an instructor each time an individual instructed by the instructor practices the motion without the instructor.

**13**. The method of claim 1 further comprising compiling data from the plurality of individuals to generate statistical data usable to manufacturers of equipment and apparel used when executing the motions in a selected sport.

**14**. The method of claim 1 further comprising compiling data from the plurality of individuals to generate statistical data usable by manufacturers of at least one of golf balls, golf shoes, golf clubs, golfing apparel, golf grips, golf gloves, and golf teaching apparatuses used for executing the

motions, and wherein the statistical data is accountable for individual handicaps, including slices.

**15**. The method of claim 1 further comprising:

compiling data from the plurality of individuals to generate statistical data usable by manufacturers of equipment and apparel used when executing the motions in a selected sport, and wherein the statistical data is accountable for individual handicaps;

compiling data for a particular individual to generate statistical data usable by the particular individual, and wherein the statistical data is accountable for handicaps of the particular individual; and

generating a recommendation of what equipment and apparel the particular individual should purchase based on statistical data generated for the particular individual and for the statistical data generated for the plurality of individuals.

**16**. The method of claim 1 further comprising:

compiling data from the plurality of individuals to generate statistical data usable by manufacturers of at least one of golf balls, golf shoes, golf clubs, golfing apparel, golf grips, golf gloves, and golf teaching apparatuses used for executing the motions, and wherein the statistical data is accountable for individual handicaps;

compiling data for a particular individual to generate statistical data usable by the particular individual, and wherein the statistical data is accountable for handicaps of the particular individual; and

generating a recommendation of what golf balls, golf shoes, golf clubs, golfing apparel, golf grips, golf gloves, and golf teaching apparatuses the particular individual should purchase based on statistical data generated for the particular individual and for the statistical data generated for the plurality of individuals.

**17**. The method of claim 1 wherein the repetitive motion is at least one of a golf swing, a basketball shot, a baseball bat swing, a tennis swing, a bowling ball swing, a baseball pitch, a gymnastic exercise, and figure skating.

**18**. The method of claim 1 for conducting a virtual tournament between individuals of a selected portion of the plurality of individuals, the method further comprising:

selecting for each individual of the selected portion of the plurality of individuals data describing at least one motion, the data including performance results of the at least one motion;

comparing for each individual of the selected portion of the plurality of individuals the data including performance results of the at least one motion to determine which individual has the best performance results from the at least one respective motion; and

identifying the individual of the selected portion of the plurality of individuals having the best performance results of the at least one respective motion as the winner of the virtual tournament between individuals of a selected portion of the plurality of individuals.

**19**. The method of claim 1 for conducting a virtual tournament between individuals of a selected portion of the plurality of individuals, the method further comprising:

selecting for each individual of the selected portion of the plurality of individuals data describing at least one motion, the data including performance results of the at least one motion;

comparing for each individual of the selected portion of the plurality of individuals the data including performance results of the at least one motion to determine which individual has the best performance results from the at least one respective motion;

identifying the individual of the selected portion of the plurality of individuals having the best performance results of the at least one respective motion as the winner of the virtual tournament between individuals of a selected portion of the plurality of individuals; and

simulating an actual environment where the repetitive motion is executed.

**20**. The method of claim 1 for managing a competition to determine which individual of a selected portion of the plurality of individuals has improved the most, the method further comprising:

designating for each individual of the selected portion of the plurality of individuals a respective model motion to be a respective motion template;

comparing at a first point in time for each individual of the selected portion of the plurality of individuals at least one respective first executed repetitive motion against a respective motion template to determine at least one first respective delta between the respective motion template and the respective first executed repetitive motion;

comparing at a second point in time for each individual of the selected portion of the plurality of individuals at least one respective second executed repetitive motion against a respective motion template to determine at least one second respective delta between the respective motion template and the respective executed repetitive motion;

determining for each individual of the selected portion of the plurality of individuals the respective decrease from the respective first delta to the respective second delta; and

identifying the individual of the selected portion of the plurality of individuals having the maximum decrease as the winner of the competition to determine which individual of the selected portion of the plurality of individuals has improved the most.

**21**. The method of claim 1 for managing a competition to determine which individual of a selected portion of the plurality of individuals has been most consistent in practicing repetitive motions, the method further comprising:

designating for each individual of the selected portion of the plurality of individuals a respective model motion to be a respective motion template;

comparing at each of a plurality of points in time for each individual of the selected portion of the plurality of individuals at least one respective executed repetitive motion against a respective motion template to determine at least one respective delta between the respective motion template and the respective executed

repetitive motion, thereby establishing a sequence of deltas for each individual of the selected portion of the plurality of individuals;

determining for each individual of the selected portion of the plurality of individuals a respective variance of respective deltas; and

identifying the individual of the selected portion of the plurality of individuals having the least variance as the winner of the competition to determine which individual of a selected portion of the plurality of individuals has been most consistent in practicing repetitive motions.

**22**. The method of claim 1 for managing a competition to determine which individual of a selected portion of the plurality of individuals is practicing closest to a respective motion template, the method further comprising:

designating for each individual of the selected portion of the plurality of individuals a respective model motion to be a respective motion template;

comparing for each individual of the selected portion of the plurality of individuals at least one respective executed repetitive motion against a respective motion template to determine at least one respective delta between the respective motion template and the respective executed repetitive motion; and

identifying the individual of the selected portion of the plurality of individuals having the least delta as the winner of the competition to determine which individual is practicing closest to a respective motion template.

**23**. A programmed digital computer for managing data describing each of a plurality of repetitive motions executed by a plurality of individuals at a plurality of repetitive motion stations located at a plurality of locations, the programmed digital switch including a computer program comprising:

computer program code for receiving the data describing each repetitive motion of each of the plurality of individuals at each of the plurality of repetitive motion station at each of the plurality of locations;

computer program code for recording the data in a data storage device connected to each of the plurality of repetitive motion stations located at each of the plurality of locations;

computer program code for receiving through a network from a requester a request for at least one portion of the data; and

computer program code for transmitting through the network to the requester the at least one portion of the data.

**24**. The computer of claim 23 wherein the requester is one of the individual who executed the repetitive motions, an instructor responsible for instructing the individual who executed the repetitive motions, and another individual who has permission to access the data.

**25**. The computer of claim 23 wherein the network comprises at least one of the Internet, an intranet, a local area network (LAN), a wide area network (WAN), a T1 line, and satellite communication.

**26**. The computer of claim 23 wherein requester is the individual who executed the repetitive motions, the network comprises at least one of the Internet, an intranet, a local area network (LAN), a wide area network (WAN), a T1 line, and satellite communication, and the request is generated by the individual from a computer terminal located at the individual's residential home.

**27**. The computer of claim 23 wherein the repetitive motions include at least one of a previous motion executed by the individual, a motion template executed by the individual, and a motion generated by an expert.

**28**. The computer of claim 23 further comprising:

computer program code for designating for a selected individual a model motion to be a motion template for the selected individual;

computer program code for recording the template in the data storage device; and

computer program code for comparing executed repetitive motion of the selected individual against the motion template to determine at least one delta between the motion template and the executed repetitive motion.

**29**. The computer of claim 23 wherein the plurality of stations include at least two stations geographically separated from each other.

**30**. The computer of claim 23 further comprising:

computer program code for designating for a selected individual a model motion executed by the individual at a first station at a first location to be a motion template for the selected individual;

computer program code for recording the motion template in the data storage device;

computer program code for executing a repetitive motion by the first individual at a second station at a second location separated from the first station at the first location; and

computer program code for comparing executed repetitive motion of the selected individual at the second station at the second location against the motion template to determine at least one delta between the motion template and the executed repetitive motion.

**31**. The computer of claim 23 further comprising:

computer program code for designating for a selected individual a model motion to be a motion template for the selected individual;

computer program code for recording the motion template in the data storage device;

computer program code for comparing an executed repetitive motion of the selected individual against the motion template to determine at least one delta between the motion template and the executed repetitive motion; and

computer program code for providing feedback describing the at least one delta to the selected individual.

**32**. The computer of claim 23 further comprising:

computer program code for designating for a selected individual a model motion to be a motion template for the selected individual;

computer program code for recording the motion template in the data storage device;

computer program code for comparing an executed repetitive motion of the selected individual against the motion template to determine at least one delta between the motion template and the executed repetitive motion;

computer program code for developing an individual feedback profile; and

computer program code for providing feedback in accordance with the individual feedback profile describing the at least one delta to the selected individual.

**33**. The computer of claim 23 further comprising:

computer program code for designating for a selected individual a model motion to be a motion template for the selected individual;

computer program code for recording the motion template in the data storage device;

computer program code for comparing an executed repetitive motion of the selected individual against the motion template to determine at least one delta between the motion template and the executed repetitive motion;

computer program code for developing an individual feedback profile indicating individual preference for the presence or absence of at least one of positive feedback, negative feedback, visual feedback, audible feedback, verbal feedback, one or more selected aspects of the executed repetitive motion, and time of the executed repetitive motion; and

computer program code for providing feedback in accordance with the individual feedback profile describing the at least one delta to the selected individual.

**34**. The computer of claim 23 further comprising computer program code for determining a monetary amount to pay to an instructor each time an individual instructed by the instructor practices the motion without the instructor.

**35**. The computer of claim 23 further comprising computer program code for compiling data from the plurality of individuals to generate statistical data usable by manufacturers of equipment and apparel used when executing the motions in a selected sport.

**36**. The computer of claim 23 further comprising computer program code for compiling data from the plurality of individuals to generate statistical data usable by manufacturers of at least one of golf balls, golf shoes, golf clubs, golfing apparel, golf grips, golf gloves, and golf teaching apparatuses used for executing the motions, and wherein the statistical data is accountable for individual handicaps, including slices.

**37**. The computer of claim 23 further comprising:

computer program code for compiling data from the plurality of individuals to generate statistical data usable by manufacturers of equipment and apparel used when executing the motions in a selected sport, and wherein the statistical data is accountable for individual handicaps;

computer program code for compiling data for a particular individual to generate statistical data usable by the particular individual, and wherein the statistical data is accountable for handicaps of the particular individual; and

computer program code for generating a recommendation of what equipment and apparel the particular individual should purchase based on statistical data generated for the particular individual and for the statistical data generated for the plurality of individuals.

**38**. The computer of claim 23 further comprising:

computer program code for compiling data from the plurality of individuals to generate statistical data usable by manufacturers of at least one of golf balls, golf shoes, golf clubs, golfing apparel, golf grips, golf gloves, and golf teaching apparatuses used for executing the motions, and wherein the statistical data is accountable for individual handicaps;

computer program code for compiling data for a particular individual to generate statistical data usable by the particular individual, and wherein the statistical data is accountable for handicaps of the particular individual; and

computer program code for generating a recommendation of what golf balls, golf shoes, golf clubs, golfing apparel, golf grips, golf gloves, and golf teaching apparatuses the particular individual should purchase based on statistical data generated for the particular individual and for the statistical data generated for the plurality of individuals.

**39**. The computer of claim 23 wherein the repetitive motion is at least one of a golf swing, a basketball shot, a baseball bat swing, a tennis swing, a bowling ball swing, a baseball pitch, a gymnastic exercise, and figure skating.

**40**. The computer of claim 23 for conducting a virtual tournament between individuals of a selected portion of the plurality of individuals, the computer further comprising:

computer program code for selecting for each individual of the selected portion of the plurality of individuals data describing at least one motion, the data including performance results of the at least one motion;

computer program code for comparing for each individual of the selected portion of the plurality of individuals the data including performance results of the at least one motion to determine which individual of the selected portion of the plurality of individuals has the best performance results of the at least one respective motion; and

computer program code for identifying the individual of the selected portion of the plurality of individuals having the best performance results of the at least one respective motion as the winner of the virtual tournament between individuals of a selected portion of the plurality of individuals.

**41**. The computer of claim 23 for managing a competition to determine which individual of a selected portion of the plurality of individuals has improved the most, the computer further comprising:

computer program code for designating for each individual of the selected portion of the plurality of individuals a respective model motion to be a respective motion template;

computer program code for comparing at a first point in time for each individual of the selected portion of the plurality of individuals at least one respective first

executed repetitive motion against a respective motion template to determine at least one first respective delta between the respective motion template and the respective first executed repetitive motion;

computer program code for comparing at a second point in time for each individual of the selected portion of the plurality of individuals at least one respective second executed repetitive motion against a respective motion template to determine at least one second respective delta between the respective motion template and the respective executed repetitive motion;

computer program code for determining for each individual of the selected portion of the plurality of individuals the respective decrease from the respective first delta to the respective second delta; and

computer program code for identifying the individual of the selected portion of the plurality of individuals having the maximum decrease as the winner of the competition to determine which individual of the selected portion of the plurality of individuals has improved the most.

**42**. The computer of claim 23 for managing a competition to determine which individual of a selected portion of the plurality of individuals has been most consistent in practicing repetitive motions, the computer further comprising:

computer program code for designating for each individual of the selected portion of the plurality of individuals a respective model motion to be a respective motion template;

computer program code for comparing at each of a plurality of points in time for each individual of the selected portion of the plurality of individuals at least one respective executed repetitive motion against a respective motion template to determine at least one respective delta between the respective motion template and the respective executed repetitive motion, thereby establishing a sequence of deltas for each individual of the selected portion of the plurality of individuals;

computer program code for determining for each individual of the selected portion of the plurality of individuals a respective variance of respective deltas; and

computer program code for identifying the individual of the selected portion of the plurality of individuals having the least variance as the winner of the competition to determine which individual of a selected portion of the plurality of individuals has been most consistent in practicing repetitive motions.

**43**. The computer of claim 23 for managing a competition to determine which individual of a selected portion of the plurality of individuals is practicing closest to a respective motion template, the computer further comprising:

computer program code for designating for each individual of the selected portion of the plurality of individuals a respective model motion to be a respective motion template;

computer program code for comparing for each individual of the selected portion of the plurality of individuals at least one respective executed repetitive motion against a respective motion template to determine at least one respective delta between the respective motion template and the respective executed repetitive motion to determine which individual of the selected portion of the plurality of individuals has the least delta; and

computer program code for identifying the individual of the selected portion of the plurality of individuals having the least delta as the winner of the competition to determine which individual is practicing closest to a respective motion template.

**44**. A computer program product for managing data describing each of a plurality of repetitive motions executed by a plurality of individuals at a plurality of repetitive motion stations located at a plurality of locations, the computer program product having a medium with a computer program embodied thereon, the computer program comprising:

computer program code for receiving the data describing each repetitive motion of each of the plurality of individuals at each of the plurality of repetitive motion station at each of the plurality of locations;

computer program code for recording the data in a data storage device connected to each of the plurality of repetitive motion stations located at each of the plurality of locations;

computer program code for receiving through a network from a requester a request for at least one portion of the data; and

computer program code for transmitting through the network to the requester the at least one portion of the data.

**45**. The computer program product of claim 44 wherein the requester is one of the individual who executed the repetitive motions, an instructor responsible for instructing the individual who executed the repetitive motions, and another individual who has permission to access the data.

**46**. The computer program product of claim 44 wherein the network comprises at least one of the Internet, an intranet, a local area network (LAN), a wide area network (WAN), a T1 line, and satellite communication.

**47**. The computer program product of claim 44 wherein requester is the individual who executed the repetitive motions, the network comprises at least one of the Internet, an intranet, a local area network (LAN), a wide area network (WAN), a T1 line, and satellite communication, and the request is generated by the individual from a computer terminal located at the individual's residential home.

**48**. The computer program product of claim 44 wherein the repetitive motions include at least one of a previous motion executed by the individual, a motion template executed by the individual, and a motion generated by an expert.

**49**. The computer program product of claim 44 further comprising:

computer program code for designating for a selected individual a model motion to be a motion template for the selected individual;

computer program code for recording the template in the data storage device; and

computer program code for comparing executed repetitive motions of the selected individual against the

motion template to determine at least one delta between the motion template and the executed repetitive motion.

**50**. The computer program product of claim 44 wherein the plurality of stations include at least two stations geographically separated from each other.

**51**. The computer program product of claim 44 further comprising:

computer program code for designating for a selected individual a model motion executed by the individual at a first station at a first location to be a motion template for the selected individual;

computer program code for recording the motion template in the data storage device;

computer program code for executing a repetitive motion by the first individual at a second station at a second location separated from the first station at the first location; and

computer program code for comparing executed repetitive motions of the selected individual at the second station at the second location against the motion template to determine at least one delta between the motion template and the executed repetitive motion.

**52**. The computer program product of claim 44 further comprising:

computer program code for designating for a selected individual a model motion to be a motion template for the selected individual;

computer program code for recording the motion template in the data storage device;

computer program code for comparing an executed repetitive motion of the selected individual against the motion template to determine at least one delta between the motion template and the executed repetitive motion; and

computer program code for providing feedback describing the at least one delta to the selected individual.

**53**. The computer program product of claim 44 further comprising:

computer program code for designating for a selected individual a model motion to be a motion template for the selected individual;

computer program code for recording the motion template in the data storage device;

computer program code for comparing an executed repetitive motion of the selected individual against the motion template to determine at least one delta between the motion template and the executed repetitive motion;

computer program code for developing an individual feedback profile; and

computer program code for providing feedback in accordance with the individual feedback profile describing the at least one delta to the selected individual.

**54**. The computer program product of claim 44 further comprising:

computer program code for designating for a selected individual a model motion to be a motion template for the selected individual;

computer program code for recording the motion template in the data storage device;

computer program code for comparing an executed repetitive motion of the selected individual against the motion template to determine at least one delta between the motion template and the executed repetitive motion;

computer program code for developing an individual feedback profile indicating individual preference for the presence or absence of at least one of positive feedback, negative feedback, visual feedback, audible feedback, verbal feedback, one or more selected aspects of the executed repetitive motion, and time of the executed repetitive motion; and

computer program code for providing feedback in accordance with the individual feedback profile describing the at least one delta to the selected individual.

**55**. The computer program product of claim 44 further comprising computer program code for determining a monetary amount to pay to an instructor each time an individual instructed by the instructor practices the motion without the instructor.

**56**. The computer program product of claim 44 further comprising computer program code for compiling data from the plurality of individuals to generate statistical data usable by manufacturers of equipment and apparel used when executing the motions in a selected sport.

**57**. The computer program product of claim 44 further comprising computer program code for compiling data from the plurality of individuals to generate statistical data usable by manufacturers of at least one of golf balls, golf shoes, golf clubs, golfing apparel, golf grips, golf gloves, and golf teaching apparatuses used for executing the motions, and wherein the statistical data is accountable for individual handicaps, including slices.

**58**. The computer program product of claim 44 further comprising:

computer program code for compiling data from the plurality of individuals to generate statistical data usable by manufacturers of equipment and apparel used when executing the motions in a selected sport, and wherein the statistical data is accountable for individual handicaps;

computer program code for compiling data for a particular individual to generate statistical data usable by the particular individual, and wherein the statistical data is accountable for handicaps of the particular individual; and

computer program code for generating a recommendation of what equipment and apparel the particular individual should purchase based on statistical data generated for the particular individual and for the statistical data generated for the plurality of individuals.

**59**. The computer program product of claim 44 further comprising:

computer program code for compiling data from the plurality of individuals to generate statistical data usable by manufacturers of at least one of golf balls, golf shoes, golf clubs, golfing apparel, golf grips, golf gloves, and golf teaching apparatuses used for executing the motions, and wherein the statistical data is accountable for individual handicaps;

computer program code for compiling data for a particular individual to generate statistical data usable by the particular individual, and wherein the statistical data is accountable for handicaps of the particular individual; and

computer program code for generating a recommendation of what golf balls, golf shoes, and golf clubs golfing apparel, golf grips, golf gloves, and golf teaching apparatuses the particular individual should purchase based on statistical data generated for the particular individual and for the statistical data generated for the plurality of individuals.

**60**. The computer program product of claim 44 wherein the repetitive motion is at least one of a golf swing, a basketball shot, a baseball bat swing, a tennis swing, a bowling ball swing, a baseball pitch, a gymnastic exercise, and figure skating.

**61**. The computer program product of claim 44 for conducting a virtual tournament between individuals of a selected portion of the plurality of individuals, the computer program product further comprising:

computer program code for selecting for each individual of the selected portion of the plurality of individuals data describing at least one motion, the data including performance results of the at least one motion;

computer program code for comparing for each individual of the selected portion of the plurality of individuals the data including performance results of the at least one motion to determine which individual of the selected portion of the plurality of individuals has the best performance results of the at least one respective motion; and

computer program code for identifying the individual of the selected portion of the plurality of individuals having the best performance results of the at least one respective motion as the winner of the virtual tournament between individuals of a selected portion of the plurality of individuals.

**62**. The computer program product of claim 44 for managing a competition to determine which individual of a selected portion of the plurality of individuals has improved the most, the computer program product further comprising:

computer program code for designating for each individual of the selected portion of the plurality of individuals a respective model motion to be a respective motion template;

computer program code for comparing at a first point in time for each individual of the selected portion of the plurality of individuals at least one respective first executed repetitive motion against a respective motion template to determine at least one first respective delta between the respective motion template and the respective first executed repetitive motion;

computer program code for comparing at a second point in time for each individual of the selected portion of the plurality of individuals at least one respective second executed repetitive motion against a respective motion template to determine at least one second respective delta between the respective motion template and the respective executed repetitive motion;

computer program code for determining for each individual of the selected portion of the plurality of individuals the respective decrease from the respective first delta to the respective second delta; and

computer program code for identifying the individual of the selected portion of the plurality of individuals having the maximum decrease as the winner of the competition to determine which individual of the selected portion of the plurality of individuals has improved the most.

**63**. The computer program product of claim 44 for managing a competition to determine which individual of a selected portion of the plurality of individuals has been most consistent in practicing repetitive motions, the computer program product further comprising:

computer program code for designating for each individual of the selected portion of the plurality of individuals a respective model motion to be a respective motion template;

computer program code for comparing at each of a plurality of points in time for each individual of the selected portion of the plurality of individuals at least one respective executed repetitive motion against a respective motion template to determine at least one respective delta between the respective motion template and the respective executed repetitive motion, thereby establishing a sequence of deltas for each individual of the selected portion of the plurality of individuals;

computer program code for determining for each individual of the selected portion of the plurality of individuals a respective variance of respective deltas; and

computer program code for identifying the individual of the selected portion of the plurality of individuals having the least variance as the winner of the competition to determine which individual of a selected portion of the plurality of individuals has been most consistent in practicing repetitive motions.

**64**. The computer program product of claim 44 for managing a competition to determine which individual of a selected portion of the plurality of individuals is practicing closest to a respective motion template, the computer program product further comprising:

computer program code for designating for each individual of the selected portion of the plurality of individuals a respective model motion to be a respective motion template;

computer program code for comparing for each individual of the selected portion of the plurality of individuals at least one respective executed repetitive motion against a respective motion template to determine at least one respective delta between the respective motion template and the respective executed repetitive motion to determine which individual of the selected portion of the plurality of individuals has the least delta; and

computer program code for identifying the individual of the selected portion of the plurality of individuals having the least delta as the winner of the competition to determine which individual is practicing closest to a respective motion template.

**65**. A system for managing repetitive motion data describing each of a plurality of repetitive motions executed by a plurality of individuals at a plurality of repetitive motion stations located at a plurality of locations, the system comprising:

a communications network;

a data processing system connected to the network;

a data storage device connected to the data processing system, the data storage device being configured for storing data received from, and retrieving data requested by, the data processing system;

at least one repetitive motion station connected to the network and configured for generating and transmitting repetitive motion data via the network to the data processing system configured for processing the data and storing the data in the storage device; and

at least one remote terminal connected to the network and configured for sending messages via the network to the data processing system for the retrieval of repetitive motion data from the data storage device.

**66**. The system of claim 65 wherein the requester is one of the individual who executed the repetitive motions, an instructor responsible for instructing the individual who executed the repetitive motions, and another individual who has permission to access the data.

**67**. The system of claim 65 wherein the network comprises at least one of the Internet, an intranet, a local area network (LAN), a wide area network (WAN), a T1 line, and satellite communication.

**68**. The system of claim 65 wherein the at least one remote terminal is a computer terminal located at a residential home.

**69**. The system of claim 65 wherein the repetitive motions include at least one of a previous motion executed by the individual, a motion template executed by the individual, and a motion generated by an expert.

**70**. The system of claim 65, wherein the data processing system further comprises memory comprising:

computer program code for designating for a selected individual a model motion to be a motion template for the selected individual;

computer program code for recording the template in the data storage device; and

computer program code for comparing executed repetitive motions of the selected individual against the motion template to determine at least one delta between the motion template and the executed repetitive motion.

**71**. The system of claim 65 wherein the plurality of stations include at least two stations geographically separated from each other.

**72**. The system of claim 65, wherein the data processing system further comprises memory comprising:

computer program code for designating for a selected individual a model motion executed by the individual at a first station at a first location to be a motion template for the selected individual;

computer program code for recording the motion template in the data storage device;

computer program code for executing a repetitive motion by the first individual at a second station at a second location separated from the first station at the first location; and

computer program code for comparing executed repetitive motions of the selected individual at the second station at the second location against the motion template to determine at least one delta between the motion template and the executed repetitive motion.

**73**. The system of claim 65, wherein the data processing system further comprises memory comprising:

computer program code for designating for a selected individual a model motion to be a motion template for the selected individual;

computer program code for recording the motion template in the data storage device;

computer program code for comparing an executed repetitive motion of the selected individual against the motion template to determine at least one delta between the motion template and the executed repetitive motion; and

computer program code for providing feedback describing the at least one delta to the selected individual.

**74**. The system of claim 65, wherein the data processing system further comprises memory comprising:

computer program code for designating for a selected individual a model motion to be a motion template for the selected individual;

computer program code for recording the motion template in the data storage device;

computer program code for comparing an executed repetitive motion of the selected individual against the motion template to determine at least one delta between the motion template and the executed repetitive motion;

computer program code for developing an individual feedback profile; and

computer program code for providing feedback in accordance with the individual feedback profile describing the at least one delta to the selected individual.

**75**. The system of claim 65, wherein the data processing system further comprises memory comprising:

computer program code for designating for a selected individual a model motion to be a motion template for the selected individual;

computer program code for recording the motion template in the data storage device;

computer program code for comparing an executed repetitive motion of the selected individual against the motion template to determine at least one delta between the motion template and the executed repetitive motion;

computer program code for developing an individual feedback profile indicating individual preference for the presence or absence of at least one of positive feedback, negative feedback, visual feedback, audible feedback, verbal feedback, one or more selected aspects of the executed repetitive motion, and time of the executed repetitive motion; and

computer program code for providing feedback in accordance with the individual feedback profile describing the at least one delta to the selected individual.

**76**. The system of claim 65, wherein the data processing system further comprises memory comprising computer program code for determining a monetary amount to pay to an instructor each time an individual instructed by the instructor practices the motion without the instructor.

**77**. The system of claim 65, wherein the data processing system further comprises memory comprising computer program code for compiling data from the plurality of individuals to generate statistical data usable by manufacturers of equipment and apparel used when executing the motions in a selected sport.

**78**. The system of claim 65, wherein the data processing system further comprises memory comprising computer program code for compiling data from the plurality of individuals to generate statistical data usable by manufacturers of at least one of golf balls, golf shoes, golf clubs, golfing apparel, golf grips, golf gloves, golf teaching apparatuses used for executing the motions, and wherein the statistical data is accountable for individual handicaps, including slices.

**79**. The system of claim 65, wherein the data processing system further comprises memory comprising:

computer program code for compiling data from the plurality of individuals to generate statistical data usable by manufacturers of equipment and apparel used when executing the motions in a selected sport, and wherein the statistical data is accountable for individual handicaps;

computer program code for compiling data for a particular individual to generate statistical data usable by the particular individual, and wherein the statistical data is accountable for handicaps of the particular individual; and

computer program code for generating a recommendation of what equipment the particular individual should purchase based on statistical data generated for the particular individual and for the statistical data generated for the plurality of individuals.

**80**. The system of claim 65, wherein the data processing system further comprises memory comprising:

computer program code for compiling data from the plurality of individuals to generate statistical data usable by manufacturers of at least one of golf balls, golf shoes, golf clubs, golfing apparel, golf grips, golf gloves, and golf teaching apparatuses used for executing the motions, and wherein the statistical data is accountable for individual handicaps;

computer program code for compiling data for a particular individual to generate statistical data usable by the particular individual, and wherein the statistical data is accountable for handicaps of the particular individual; and

computer program code for generating a recommendation of what golf balls, golf shoes, golf clubs, golfing apparel, golf grips, golf gloves, and golf teaching apparatuses the particular individual should purchase based on statistical data generated for the particular individual and for the statistical data generated for the plurality of individuals.

**81**. The system of claim 65 wherein the repetitive motion is at least one of a golf swing, a basketball shot, a baseball bat swing, a tennis swing, a bowling ball swing, a baseball pitch, a gymnastic exercise, and figure skating.

**82**. The system of claim 65, wherein the data processing system further comprises memory comprising:

computer program code for selecting for each individual of the selected portion of the plurality of individuals data describing at least one motion, the data including performance results of the at least one motion;

computer program code for comparing for each individual of the selected portion of the plurality of individuals the data including performance results of the at least one motion to determine which individual of the selected portion of the plurality of individuals has the best performance results of the at least one respective motion; and

computer program code for identifying the individual of the selected portion of the plurality of individuals having the best performance results of the at least one respective motion as the winner of the virtual tournament between individuals of a selected portion of the plurality of individuals.

**83**. The system of claim 65, wherein the data processing system further comprises memory comprising:

computer program code for designating for each individual of the selected portion of the plurality of individuals a respective model motion to be a respective motion template;

computer program code for comparing at a first point in time for each individual of the selected portion of the plurality of individuals at least one respective first executed repetitive motion against a respective motion template to determine at least one first respective delta between the respective motion template and the respective first executed repetitive motion;

computer program code for comparing at a second point in time for each individual of the selected portion of the plurality of individuals at least one respective second executed repetitive motion against a respective motion template to determine at least one second respective delta between the respective motion template and the respective executed repetitive motion;

computer program code for determining for each individual of the selected portion of the plurality of individuals the respective decrease from the respective first delta to the respective second delta; and

computer program code for identifying the individual of the selected portion of the plurality of individuals having the maximum decrease as the winner of the competition to determine which individual of the selected portion of the plurality of individuals has improved the most.

**84**. The system of claim 65, wherein the data processing system further comprises memory comprising:

computer program code for designating for each individual of the selected portion of the plurality of individuals a respective model motion to be a respective motion template;

computer program code for comparing at each of a plurality of points in time for each individual of the selected portion of the plurality of individuals at least one respective executed repetitive motion against a respective motion template to determine at least one respective delta between the respective motion template and the respective executed repetitive motion, thereby establishing a sequence of deltas for each individual of the selected portion of the plurality of individuals;

computer program code for determining for each individual of the selected portion of the plurality of individuals a respective variance of respective deltas; and

computer program code for identifying the individual of the selected portion of the plurality of individuals having the least variance as the winner of the competition to determine which individual of a selected portion of the plurality of individuals has been most consistent in practicing repetitive motions.

**85**. The system of claim 65, wherein the data processing system further comprises memory comprising:

computer program code for designating for each individual of the selected portion of the plurality of individuals a respective model motion to be a respective motion template;

computer program code for comparing for each individual of the selected portion of the plurality of individuals at least one respective executed repetitive motion against a respective motion template to determine at least one respective delta between the respective motion template and the respective executed repetitive motion to determine which individual of the selected portion of the plurality of individuals has the least delta; and

computer program code for identifying the individual of the selected portion of the plurality of individuals having the least delta as the winner of the competition to determine which individual is practicing closest to a respective motion template.

**86**. A method for managing data, the method comprising the steps of:

monitoring and generating data describing at least one first repetitive motion executed by at least one first individual at at least one first repetitive motion station located at at least one first location;

monitoring and generating data describing at least one second repetitive motion executed by at least one second individual at at least one second repetitive motion station located at at least one second location geographically separated from the at least one first location;

transmitting the data describing the at least one first and second repetitive motions from the first and second practice bays via a network to a network server computer having a data storage device; and

recording the data to the data storage device.

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