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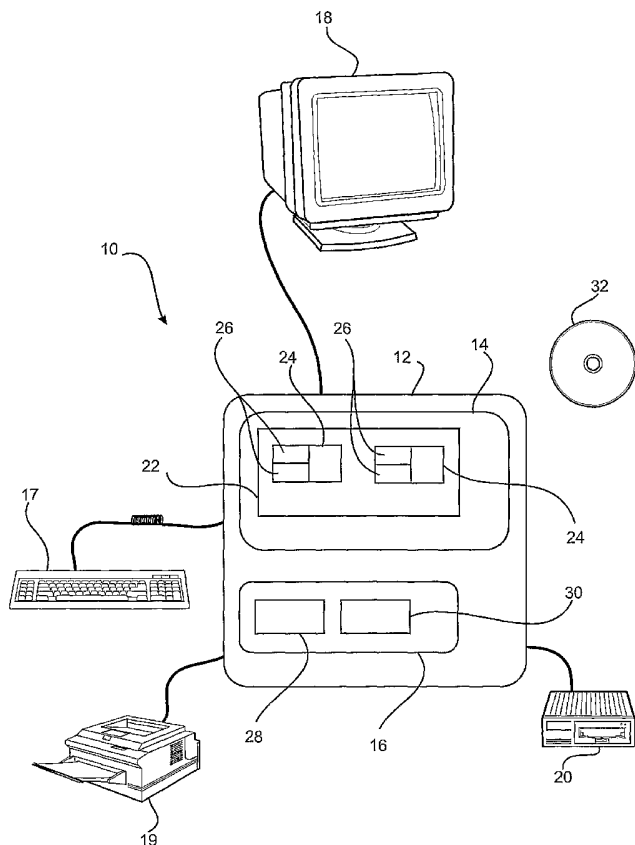
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(54) Title: SYSTEM AND METHOD FOR COMPILING A TRAINING PROGRAM



(57) Abstract: A system (10) for compiling a training program comprising a computer (12) having a database (14) and a program (16). The database (14) has an exercise library (22) having a plurality of executable training exercise modules (24). The program (16) is operable to select a set of training exercise modules (24) from the exercise library (22) and sequence training exercise modules (24) within the set of selected training exercise modules (24) to form a set of sequenced training exercise modules (24). The system (10) further comprises copying means in the form of a burner (20) for copying the set of sequenced training exercise modules (24) to a storage medium, such as a Digital Versatile Disk (32). Execution of the set of sequenced training exercise modules (24) demonstrates the technique for carrying out the training program in real time, with an appropriate audio commentary.

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“System and Method for Compiling a Training Program”

Field of the Invention

The present invention relates to a system and method for compiling a training program.

- 5 The system and method are particularly relevant to compiling an exercise rehabilitation program. However, the invention is applicable to compiling a program for the acquisition of any skill.

Throughout the specification, unless the context requires otherwise, the word “comprise” or variations such as “comprises” or “comprising”, will be understood to
10 imply the inclusion of a stated integer or group of integers but not the exclusion of any other integer or group of integers.

Background Art

The following discussion of the background to the invention is intended to facilitate an understanding of the present invention. However, it should be appreciated that
15 the discussion is not an acknowledgment or admission that any of the material referred to was published, known or part of the common general knowledge of the person skilled in the art in any jurisdiction as at the priority date of the application.

As part of a patient’s treatment for an injury, a health care practitioner may prescribe a regime comprising a set of rehabilitation exercises to be performed by
20 the patient before their next consultation with the practitioner.

Typically, the demonstration provided to the patient in regard to how to perform the regime consists of the practitioner physically guiding the patient through each exercise in the set of exercises forming the regime. This suffers from a problem in that, after the consultation, the patient must rely on their memory to recall how the
25 exercises are to be performed. This may be extremely difficult, especially if the

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patient was in pain when being guided through the exercises, or is unfamiliar with the exercises.

In an attempt to overcome this problem, the practitioner may provide the patient with sketch drawings describing how the exercises are to be performed. Although
5 this may aid the patient's memory, the patient is still faced with the problem of interpreting how the exercises should be performed from the drawings.

As a consequence of these problems, the set of exercises forming the regime may not be performed as prescribed, leading to a delay in the patient's recovery, and potentially aggravation of the patient's injury.

10 The present invention seeks to provide a system and method for compiling a training program that alleviates these problems to at least some extent.

Disclosure of the Invention

In accordance with a first aspect of the present invention, there is provided a system for compiling a training program comprising:

15 storage means for storing a plurality of executable training modules;

selecting means operable to select a set of executable training modules from the plurality of executable training modules; and

sequencing means operable to sequence executable training modules within the set of executable training modules to form a set of sequenced
20 executable training modules.

Throughout the specification, unless the context requires otherwise, the expressions "sequencing" and "to sequence" will be understood to refer to the act of arranging or ordering in a sequence.

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Preferably, each executable training module comprises a set of attributes specifying the executable training module.

Preferably, the set of attributes comprises digital media attributes specifying features of a digital media file of an executable training module.

- 5 Preferably, the set of attributes comprises training exercise attributes specifying a training exercise of an executable training module.

Preferably, execution of the set of sequenced executable training modules provides a demonstration of the training program.

Preferably, the demonstration occurs in real time.

- 10 Preferably, execution of each executable training module provides a visual demonstration of an entire training exercise, or part of a training exercise.

Preferably, execution of a digital media file of the executable training module provides the visual demonstration.

- 15 Preferably, execution of each executable training module provides an aural demonstration of an entire training exercise, or part of a training exercise.

Preferably, execution of a digital media file of the executable training module provides the aural demonstration.

Preferably, the training exercise is a rehabilitative exercise.

- 20 Preferably, the system further comprises copying means operable to copy the set of sequenced executable training modules to a storage medium.

Preferably, the copying means comprises writing means for writing to the storage medium.

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Preferably, the storage medium comprises a Digital Versatile Disk.

Preferably, the storage medium comprises a Video Compact Disk.

Preferably, the storage medium comprises a device capable of storing and executing the set of sequenced executable training modules.

- 5 Preferably, the system further comprises group selecting means operable to select a set of groups of executable training modules, each group comprising at least two executable training modules, and group sequencing means operable to sequence groups of executable training modules within the set of groups of executable training modules to form a set of sequenced groups of executable
- 10 training modules.

Preferably, the at least two executable training modules are sequenced within each group.

Preferably, the plurality of executable training modules are stored in groups of executable training modules.

- 15 Preferably, the system further comprises group copying means operable to copy the set of sequenced groups of executable training modules to a group storage medium.

Preferably, the group copying means comprises group writing means for writing to the group storage medium.

- 20 Preferably, the group storage medium comprises a Digital Versatile Disk.

Preferably, the group storage medium comprises a Video Compact Disk.

Preferably, the group storage medium comprises a device capable of storing and executing the set of sequenced groups of executable training modules.

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In accordance with a second aspect of the present invention, there is provided a method for compiling a training program comprising:

selecting a set of executable training modules from a plurality of executable training modules; and

- 5 sequencing executable training modules within the set of executable training modules to form a set of sequenced executable training modules.

Preferably, the method further comprises copying the set of sequenced executable training modules to a storage medium.

- 10 Preferably, the method further comprises storing the plurality of executable training modules.

Preferably, the method further comprises specifying a set of attributes for an executable training module.

Preferably, the method further comprises specifying a digital media attribute for a digital media file of an executable training module.

- 15 Preferably, the method further comprises specifying a training exercise attribute for a training exercise of an executable training module.

Preferably, the method further comprises executing the set of sequenced executable training modules to provide a demonstration of the training program.

- 20 Preferably, the method further comprises selecting a set of groups of executable training modules, each group comprising at least two executable training modules, and sequencing groups of executable training modules within the set of groups of executable training modules to form a set of sequenced groups of executable training modules.

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Preferably, the method further comprises sequencing the at least two executable training modules within each group.

Preferably, the method further comprises storing the plurality of executable training modules in groups of executable training modules.

- 5 Preferably, the method further comprises copying the set of sequenced groups of executable training modules to a group storage medium.

Brief Description of the Drawings

The present invention will now be described, by way of example, with reference to the accompanying drawings, in which:

- 10 Figure 1 is a schematic drawing of a first embodiment and a second embodiment of a system for compiling a training program in accordance with aspects of the present invention; and

Figure 2 is a schematic drawing of a third embodiment of a system for compiling a training program in accordance with an aspect of the present invention.

15 Best Mode(s) for Carrying Out the Invention

In Figure 1, there is shown a first embodiment of a system 10 for compiling a training program in accordance with the present invention.

- 20 In the first embodiment, the system 10 is intended to be used by a health care practitioner, such as a physiotherapist, to compile an exercise rehabilitation program specifically designed for a particular patient. The invention is not limited to compiling exercise rehabilitation programs, however, and in alternative embodiments may be used to compile training programs facilitating the acquisition of any skill, such as athletic training programs and individualised guided learning programs, including patient specific guided surgery and other medical training
25 programs.

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The system 10 comprises a computer 12 having memory, not shown, for storing a database 14 and a program 16, and an operating system for executing application software stored in the memory, such as the program 16. Additionally, the computer 12 comprises a processor, not shown, coupled to the memory, as well
5 as user interfaces such as a keyboard 17, a display 18, and a mouse, not shown.

The system 10 further comprises a printer 19, and copying means for copying or writing to a digital storage medium in the form of a writer or burner 20, both in data communication with the computer 12.

The database 14 has an exercise library 22 having a plurality of playable or
10 executable training exercise modules 24. Each exercise module 24 has one or more executable digital media files 26 for a particular rehabilitative exercise. Execution of an exercise module 24 executes or plays the digital media file 26 thereof.

Each media file 26 is created from an original video data file, not shown, for the
15 particular rehabilitative exercise. The original video data file, when executed or played, shows a sequence of timed events providing information relating to the particular rehabilitative exercise in real time. In the embodiment described, the events are as follows:

- Event 1: an introduction to the particular rehabilitative exercise;
- 20 ○ Event 2: a demonstration of how to adopt the correct position for performing the particular rehabilitative exercise;
- Event 3: a demonstration of a first technique for performing the particular rehabilitative exercise for a predetermined number of repetitions and hold times;
- 25 ○ Event 4: a demonstration of variations of the first technique for performing the particular rehabilitative exercise for a predetermined number of repetitions and hold times;

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- Event 5: a demonstration of how to return from the correct position for performing the particular rehabilitative exercise; and
- Event 6: a conclusion to the particular rehabilitative exercise.

During each event, an appropriate aural or audio commentary is provided. This
5 commentary may comprise an explanation of the correct technique for the particular rehabilitative exercise, the benefits thereof, common errors in technique, and/or encouragement to a listener.

The original video data file is edited to form media files 26, with each media file 26 corresponding to an event, or a portion of an event, of the original video data file.

10 Accordingly, each media file 26, when executed, introduces or concludes the particular rehabilitative exercise, shows the technique for adopting or returning from the correct position for the particular rehabilitative exercise, shows the technique for totally or partially executing the particular rehabilitative exercise, or a variation thereof, for a predetermined number of repetitions and hold times, in real
15 time and with an appropriate audio commentary as described above.

The media file 26 of each exercise module 24 is digitally recorded and edited so that, when a selection of exercise modules 24 are sequenced together and the media files 26 thereof are executed or played, there is a smooth transition from one media file 26 to the next in the sequence.

20 Each exercise module 24 has a set of exercise attributes and media attributes associated with it for specifying the exercise module 24.

The set of exercise attributes identify and describe the particular rehabilitative exercise of an exercise module 24 and how it is to be performed, and include:

- the name of the particular rehabilitative exercise;
- 25 ○ variations of the particular rehabilitative exercise;

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- the symmetry of the particular rehabilitative exercise (i.e. whether it is to be performed on the left hand side, the right hand side, both or is central, in which case left or right has no relevance);
- contraindicated exercises;
- 5 ○ the number of sets the particular rehabilitative exercise is to be performed;
- the type of particular rehabilitative exercise;
- a description of the particular rehabilitative exercise, including joints involved, movement, body position and equipment used;
- 10 ○ a rest time between sets for the particular rehabilitative exercise;
- a hold time for the particular rehabilitative exercise;
- the number of repetitions the particular rehabilitative exercise is to be performed in each set; and
- the frequency the particular rehabilitative exercise is to be performed.
- 15

The set of media attributes set parameters for the media file 26 including:

- captions and information messages that are to be displayed when the media file 26 is played or executed; and
 - the run-time length of the media file 26.
- 20 Selection and arrangement of a sequence of exercise modules 24, with specified exercise and media attributes, produces a sequence of media files 26 that, when executed or played, demonstrate the technique for carrying out a prescribed

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rehabilitative exercise program customised for the patient in real time, with an appropriate audio commentary.

The present invention enables a vast number of training exercise programs to be compiled. This can be done because the present invention permits the
5 specification of exercise and media attributes of the exercise modules 24 to be varied, and further permits the selection and arrangement of exercise modules 24 into a sequence to be varied. As a consequence of the ability to vary these characteristics in this manner, a vast number of permutations of training programs can be achieved.

10 The program 16 has an administration module 28, operable via the keyboard 17 and the mouse, for maintaining, searching and editing the exercise library 22, and the exercise modules 24 contained therein.

Additionally, the program 16 has a practitioner module 30. The practitioner
15 module 30 is also operable via the keyboard 17 and the mouse. The practitioner module 30 has sub-modules, not shown, that, when executed, provide a user interface enabling the practitioner to carry out the respective following operations:

- search, locate and view an exercise module 24 within the exercise library 22;
- select and view the exercise attributes and media attributes of an
20 exercise module 24 within the exercise library 22;
- enter parameters to set the exercise attributes and media attributes of an exercise module 24 so that they are customised for the patient's prescribed rehabilitative exercise program;
- select and execute or play an exercise module 24 and the media
25 file 26 thereof;
- select a set of exercise modules 24 from the exercise library 22;

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- deselect exercise modules 24 from the set of selected exercise modules 24;
- sequence exercise modules 24 within the set of selected exercise modules 24 in any order to form a set of sequenced exercise modules 24 to compile and produce the prescribed rehabilitative exercise program customised for the patient;
- output the media files 26 of the exercise modules 24 in the set of sequenced exercise modules 24 to the burner 20 in the sequence for writing to a digital storage medium;
- author the writing of the media files 26;
- print descriptions of the exercises of the exercise modules 24 from the exercise library 22 via the printer 19;
- save the set of sequenced exercise modules 24 for the patient or a specific injury protocol in the memory of the computer 12 in association with relevant patient/consultation details or protocol details; and;
- select and execute or play the set of sequenced exercise modules 24 and the media files 26 thereof in the sequence.

The burner 20 writes the media files 26 of the sequence of exercise modules 24 onto a storage medium, such as a Digital Versatile Disk (“**DVD**”) or Video Compact Disk (“**VCD**”).

The functions of the above components, and additional features of the system 10, will now be described with reference to the system 10 in use in the treatment of a patient with a severely sprained ankle.

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Subsequent to examining the patient, the practitioner determines an appropriate treatment for the patient's sprained ankle. In the embodiment described, the treatment comprises a prescribed rehabilitative exercise routine to be performed by the patient prior to their next consultation with the practitioner. The practitioner
5 specifies requirements for the prescribed rehabilitative exercise routine to treat the patient's sprained ankle, including:

- the particular rehabilitative exercises to be performed;
- the frequency and the order in which each particular rehabilitative exercise is to be performed, including
10 recovery/rest periods between each particular rehabilitative exercise;
- the number of sets for which each particular rehabilitative exercise is to be performed; and
- the number of repetitions per set, and the hold time, for each
15 particular rehabilitative exercise to be performed.

The practitioner then operates the practitioner module 30 of the program 16 via the keyboard 17 and the mouse to select and arrange a sequence of exercise modules 24 with exercise and media attributes corresponding to the requirements specified in the prescribed rehabilitative exercise routine. This is done by utilising
20 the appropriate sub-modules within the practitioner module 30 as previously described. The media files 26 of the sequenced exercise modules 24 are sequentially arranged so that, when executed, they demonstrate the techniques for executing the prescribed rehabilitative exercise routine in real time, with an appropriate audio commentary.

25 Subsequently, the sequenced media files 26 are written onto a DVD via the burner 20 to produce an exercise program DVD 32. A copy of the requirements specified in the prescribed rehabilitative exercise routine, and a description of

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each exercise therein, is printed via the printer 19 to produce an exercise program printout, not shown.

Additionally, the sequenced exercise modules 24 may be saved by the practitioner in the memory of the computer 12 as a treatment history for the patient and as a treatment protocol for the treatment of a severely sprained ankle, to be retrieved for use in treatment of future patients having that injury.

Treatment protocols for injuries other than a severely sprained ankle may similarly be compiled and saved. In this way, the practitioner may create a library of protocols that are not specific to any particular patient, but are specific to a group of patients having a common injury, postural distortion or physical need. When treating an injury for which such a protocol exists, rather than compiling the required sequence of exercise modules 24, the practitioner may instead retrieve the particular protocol from the protocol library, and make any amendments thereto if necessary to customise the protocol to treat the particular injury. This allows for meticulous and time-consuming prescription of exercises to be completed in less time by the practitioner, and correspondingly reduced costs for the patient.

Additionally, the practitioner may share treatment protocols from their protocol library with other health care professionals, thereby creating a network of best practice information exchange and facilitating the development of benchmark standards across various healthcare professions with regard to exercise rehabilitation programs.

In the embodiment described, the exercise program DVD 32 is then given to the patient by the practitioner. The patient is thereby provided with a sequenced, timed, specifically selected set of rehabilitative exercises customised to treat the patient's specific sprained ankle injury.

When required to perform the rehabilitative exercise routine, the patient executes the sequenced media files 26 by playing the exercise program DVD 32 on a DVD

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player, not shown. On execution, the media files 26 demonstrate, guide and encourage the patient through the entire rehabilitative exercise routine in real time with appropriate informational messages and encouragement – so that the patient feels like they are being coached one-on-one through the routine.

- 5 The patient is visually guided through the rehabilitative exercise routine, thereby reducing the likelihood of the patient performing it incorrectly. The timing of the exercises in the routine are verbally cued, so the patient is alerted when to begin and cease a particular rehabilitative exercise and what particular rehabilitative exercise to perform next.
- 10 Therefore, the present invention eliminates the patient “trying to recall” how to properly perform a particular exercise. Additionally, the present invention removes the requirement for the patient to translate printed instructions into a timed, correctly performed and sequenced exercise program.

Consequently, the risk of further injury to the patient, through incorrectly
15 performing exercises is reduced. Furthermore, as exercises are more likely to be performed correctly, and all the patient has to do is play the exercise program DVD 32 and follow the audio and visual cues for a finite period, the patient is more likely to comply with the rehabilitative exercise routine and the rate of rehabilitation for the patient may be increased.

- 20 Similarly, as the rehabilitative exercise routine is customised for the patient, it does not contain contraindicated exercises that may aggravate the patient’s condition. Such contraindicated exercises may be present in “generic” exercise rehabilitation programs that the patient may self-prescribe.

The exercise program printout 34 is retained by the practitioner on a records file,
25 not shown, for the patient for future reference by the practitioner.

As the patient's treatment progresses, and the patient's condition improves, further prescribed rehabilitative exercise routines, taking into account the patient's improved condition, may be similarly compiled.

5 A second embodiment of the invention is directed toward a modification of the system 10 of the first embodiment, and will now also be described with reference to Figure 1 of the drawings. Corresponding numerals are used to denote like elements of the first and second embodiments.

The system 10 of the second embodiment differs from the system 10 of the first embodiment in that the exercise library 22 additionally comprises a plurality of
10 exercise groups, each group having a subset of exercise modules 24. The media files 26 of each exercise module 24 in the subset demonstrate an alternative rehabilitative exercise for achieving the same result, which may be, for example, strengthening the patients abdominal muscles. The alternative rehabilitative exercises demonstrated vary in difficulty, from exercises that may be performed
15 by a severely disabled person to achieve the result, through to exercises that may be performed by a professional athlete to achieve the result.

The exercise modules 24 may be sequenced within each group.

The inclusion of an exercise module 24 in one or more groups may be signified by an identifier for the particular group or groups in which it is included being
20 associated with the exercise module 24.

In the second embodiment, the administration module 28 facilitates maintaining, searching and editing the exercise groups, in addition to the exercise library 22 and the exercise modules 24.

As well as possessing the same functionality as in the first embodiment, the
25 practitioner module 30 of the second embodiment has additional sub-modules, not shown, that, when executed, provide a user interface enabling the practitioner to carry out the respective following additional operations:

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- search, locate and view an exercise group within the exercise library 22;
- select and view the subset of exercise modules 24 within an exercise group;
- 5 ○ add exercise modules 24 to, and delete exercise modules 24 from, the subset of exercise modules 24 within an exercise group;
- select and execute or play exercise modules 24 and the media files 26 thereof within an exercise group;
- 10 ○ sequence exercise modules 24 within an exercise group;
- select a set of exercise groups from the exercise library 22;
- deselect exercise groups from the set of selected exercise groups;
- 15 ○ sequence exercise groups within the set of selected exercise groups in any order to form a set of sequenced exercise groups to compile and produce a summary of a prescribed rehabilitative exercise program customised for the patient or specific treatment philosophy;
- print the sequence of selected exercise groups for the patient or the specific treatment philosophy via the printer 19;
- 20 ○ save the sequence of selected exercise groups for the patient or the specific treatment philosophy in the memory of the computer 12 in association with relevant patient/consultation details or philosophy details; and

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- o select and execute or play the exercise modules 24 and media files 26 within the set of sequenced exercise groups in the sequence.

In the second embodiment, to compile a prescribed rehabilitative exercise routine, the practitioner operates the practitioner module 30 of the program 16 to select and arrange a sequence of exercise groups from the exercise library 22. Subsequently, the practitioner selects and arranges a sequence of exercise modules 24 comprising one or more exercise modules 24 chosen from each of the subsets of exercise modules 24 of the sequenced exercise groups. The particular exercise modules 24 being chosen according to how difficult the rehabilitative exercises in the routine are prescribed to be for the patient.

In all other respects, the system 10 of the second embodiment is substantially the same as in the first embodiment, and shall not be described in further detail.

The grouping of subsets of exercise modules 24 in the second embodiment is advantageous as it facilitates the creation of a flexible treatment protocol for an injury, postural distortion or physical need by the practitioner that is a summary of a treatment philosophy for that injury, postural distortion or physical need.

The practitioner may select and arrange a sequence of exercise groups from the exercise library 22 corresponding to the treatment philosophy for an injury, and save the arranged sequence of exercise groups as an injury specific treatment philosophy protocol. When treating an injury for which such an injury specific treatment philosophy protocol exists, the practitioner may retrieve the relevant treatment philosophy protocol, and select and arrange a sequence of exercise modules 24 from the subsets of exercise modules 24 of the sequenced exercise groups therein according to how difficult the rehabilitative exercises are prescribed to be for the patient.

In this way, the practitioner is provided with the flexibility to use the same treatment philosophy protocol to treat, for example, sciatica suffered by a

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professional athlete and by an elderly person, with the sequence of exercise groups required to treat the sciatica being the same, but with exercise modules 24 demonstrating the more difficult rehabilitative exercises being chosen from each of the subsets of exercise modules 24 of the sequenced exercise groups for the
5 athlete than the elderly person.

In a similar manner to that described in the first embodiment, the practitioner may create a library of injury specific treatment philosophy protocols, to be used to save time and money, and to share with other health care professionals to facilitate the development of benchmark standards.

10 A third embodiment of the invention is directed toward a modification of the system 10 of the first embodiment, and will now also be described with reference to Figure 2 of the drawings. Corresponding numerals are used to denote like elements of the first and third embodiments.

The system 10 of the third embodiment differs from the first embodiment in that
15 the original video data file for each particular rehabilitative exercise is stored in the exercise library 22 of the database 14. The events of each of the original video data files, the exact time at which each event occurs, and the duration of each event, are recorded in an index 34 which is also stored in the database 14 and is operatively associated with the exercise library 22 and the program 16.

20 In the third embodiment, the administration module 28 facilitates maintaining, searching and editing the exercise library 22, the original video data files contained therein, and the index 34.

The practitioner module 30 of the third embodiment enables the practitioner to enter details for the prescribed rehabilitative exercise routine, comprising:

25 ○ the particular rehabilitative exercises to be performed;

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- the frequency and the order in which each particular rehabilitative exercise is to be performed, including recovery/rest periods between each particular rehabilitative exercise;
- 5 ○ the number of sets for which each particular rehabilitative exercise is to be performed; and
- the number of repetitions per set, and the hold time, for each particular rehabilitative exercise to be performed.

Once the details for the prescribed rehabilitative exercise routine have been entered, the program 16 is operable to:

- 10 ○ determine from the index 34 the events or portions of events of the original video data files required to demonstrate the prescribed rehabilitative exercise routine, along with the exact time and duration of each event or portions of event;
- 15 ○ select the determined events or portions of events from the original video data files and the duration and frequency each needs to be executed according to the prescribed rehabilitation exercise routine; and
- 20 ○ sequence the order in which the selected determined events or portions of events are executed from the original data files to demonstrate the prescribed rehabilitative exercise routine.

The program 16 is further operable to execute the sequenced order of selected determined events or portions of events to demonstrate the prescribed rehabilitative exercise routine on the display 18, and write it onto a DVD via the burner 20 to produce the exercise program DVD 32.

- 25 Additionally, the program 16 is operable to save the sequenced order of selected determined events or portions of events as an executable treatment file, not

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shown. Execution of the treatment file executes the sequenced order of selected determined events or portions of events from the original video data files to demonstrate the prescribed rehabilitative exercise routine.

5 Rather than being provided with the exercise program DVD 32, a copy of the treatment file may be saved to a computer system of the patient, along with a copy of each of the original data files. The patient may then execute the treatment file on their computer system to execute the sequenced order of selected determined events or portions of events from the original video data files to demonstrate the prescribed rehabilitative exercise routine. As the patient's
10 treatment progresses, further executable treatment files may be created and provided to them for execution on their computer system.

In all other respects, the system 10 of the third embodiment is substantially the same as in the first embodiment, and shall not be described in further detail.

15 It should be appreciated by the person skilled in the art that the invention is not limited to the embodiment described. For example, the invention as described can include the following modifications and/or additions:

- additional exercise modules 24 may be streamed or downloaded to the exercise library 22 via a communications network, such as the Internet;
- 20 ○ although described in relation to VCD's and DVD's, the invention is not so limited, and any appropriate storage medium may be used to store the sequenced media files 26;
- 25 ○ the sequenced media files 26 may be copied to a device capable of storing and executing the sequenced media files 26, such as a Personal Digital Assistant; and

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- the sequenced media files 26 may be copied to a storage memory of a server. The server may be accessed by the patient via a communications device, such as a laptop computer, and the sequenced media files 26 streamed from the server to the communications device.

10 Although described in relation to compiling exercise rehabilitation programs, the invention is not so limited, and in alternative embodiments may be used to compile training programs facilitating the acquisition of any skill. The type and nature of the executable training modules, and the attributes thereof, may be varied according to the skills or competencies required for the relevant training program being compiled.

15 It should be further appreciated by the person skilled in the art that variations and combinations of features described above, not being alternatives or substitutes, can be combined to form yet further embodiments falling within the intended scope of the invention.

The Claims Defining the Invention are as Follows

1. A system for compiling a training program comprising:
 - storage means for storing a plurality of executable training modules;
 - 5 selecting means operable to select a set of executable training modules from the plurality of executable training modules; and
 - sequencing means operable to sequence executable training modules within the set of executable training modules to form a set of sequenced executable training modules.
- 10 2. A system as claimed in claim 1, wherein each executable training module comprises a set of attributes specifying the executable training module.
3. A system as claimed in claim 2, wherein the set of attributes comprises digital media attributes specifying features of a digital media file of an executable training module.
- 15 4. A system as claimed in claim 2 or claim 3, wherein the set of attributes comprises training exercise attributes specifying a training exercise of an executable training module.
5. A system as claimed in any one of the preceding claims, wherein execution of the set of sequenced executable training modules provides a demonstration of
20 the training program.
6. A system as claimed in claim 5, wherein the demonstration occurs in real time.

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7. A system as claimed in any one of the preceding claims, wherein execution of each executable training module provides a visual demonstration of an entire training exercise, or part of a training exercise.
8. A system as claimed in claim 7, wherein execution of a digital media file of the executable training module provides the visual demonstration.
9. A system as claimed in any one of the preceding claims, wherein execution of each executable training module provides an aural demonstration of an entire training exercise, or part of a training exercise.
10. A system as claimed in claim 9, wherein execution of a digital media file of the executable training module provides the aural demonstration.
11. A system as claimed in any one of claims 7 to 10, wherein the training exercise is a rehabilitative exercise.
12. A system as claimed in any one of the preceding claims, wherein the system further comprises copying means operable to copy the set of sequenced executable training modules to a storage medium.
13. A system as claimed in claim 12, wherein the copying means comprises writing means for writing to the storage medium.
14. A system as claimed in claim 12 or claim 13, wherein the storage medium comprises a Digital Versatile Disk.
15. A system as claimed in claim 12 or claim 13, wherein the storage medium comprises a Video Compact Disk.
16. A system as claimed in any one of claims 12 to 15, wherein the storage medium comprises a device capable of storing and executing the set of sequenced executable training modules.

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17. A system as claimed in any one of the preceding claims, wherein the system further comprises group selecting means operable to select a set of groups of executable training modules, each group comprising at least two executable training modules, and group sequencing means operable to sequence groups
5 of executable training modules within the set of groups of executable training modules to form a set of sequenced groups of executable training modules.
18. A system as claimed in claim 17, wherein the at least two executable training modules are sequenced within each group.
19. A system as claimed in claim 17 or claim 18, wherein the plurality of
10 executable training modules are stored in groups of executable training modules.
20. A system as claimed in any one of claims 17 to 19, wherein the system further comprises group copying means operable to copy the set of sequenced groups of executable training modules to a group storage medium.
- 15 21. A system as claimed in claim 20, wherein the group copying means comprises group writing means for writing to the group storage medium.
22. A system as claimed in claim 20 or claim 21, wherein the group storage medium comprises a Digital Versatile Disk.
23. A system as claimed in claim 20 or claim 21, wherein the group storage
20 medium comprises a Video Compact Disk.
24. A system as claimed in any one of claims 20 to 23, wherein the group storage medium comprises a device capable of storing and executing the set of sequenced groups of executable training modules.
25. A method for compiling a training program comprising:

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selecting a set of executable training modules from a plurality of executable training modules; and

sequencing executable training modules within the set of executable training modules to form a set of sequenced executable training modules.

- 5 26. A method as claimed in claim 25, further comprising copying the set of sequenced executable training modules to a storage medium.
27. A method as claimed in claim 25 or claim 26, further comprising storing the plurality of executable training modules.
28. A method as claimed in any one of claims 25 to 27, further comprising
10 specifying a set of attributes for an executable training module.
29. A method as claimed in any one of claims 25 to 28, further comprising specifying a digital media attribute for a digital media file of an executable training module.
30. A method as claimed in any one of claims 25 to 29, further comprising
15 specifying a training exercise attribute for a training exercise of an executable training module.
31. A method as claimed in any one of claims 25 to 30, further comprising executing the set of sequenced executable training modules to provide a demonstration of the training program.
- 20 32. A method as claimed in any one of claims 25 to 31, further comprising selecting a set of groups of executable training modules, each group comprising at least two executable training modules, and sequencing groups of executable training modules within the set of groups of executable training modules to form a set of sequenced groups of executable training modules.

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33. A method as claimed in claim 32, further comprising sequencing the at least two executable training modules within each group.
34. A method as claimed in claim 32 or claim 33, further comprising storing the plurality of executable training modules in groups of executable training
5 modules.
35. A method as claimed in any one of claims 32 to 34, further comprising copying the set of sequenced groups of executable training modules to a group storage medium.
36. A system for compiling a training program substantially as hereinbefore
10 described with reference to the accompanying drawings.
37. A method for compiling a training program substantially as hereinbefore described with reference to the accompanying drawings.

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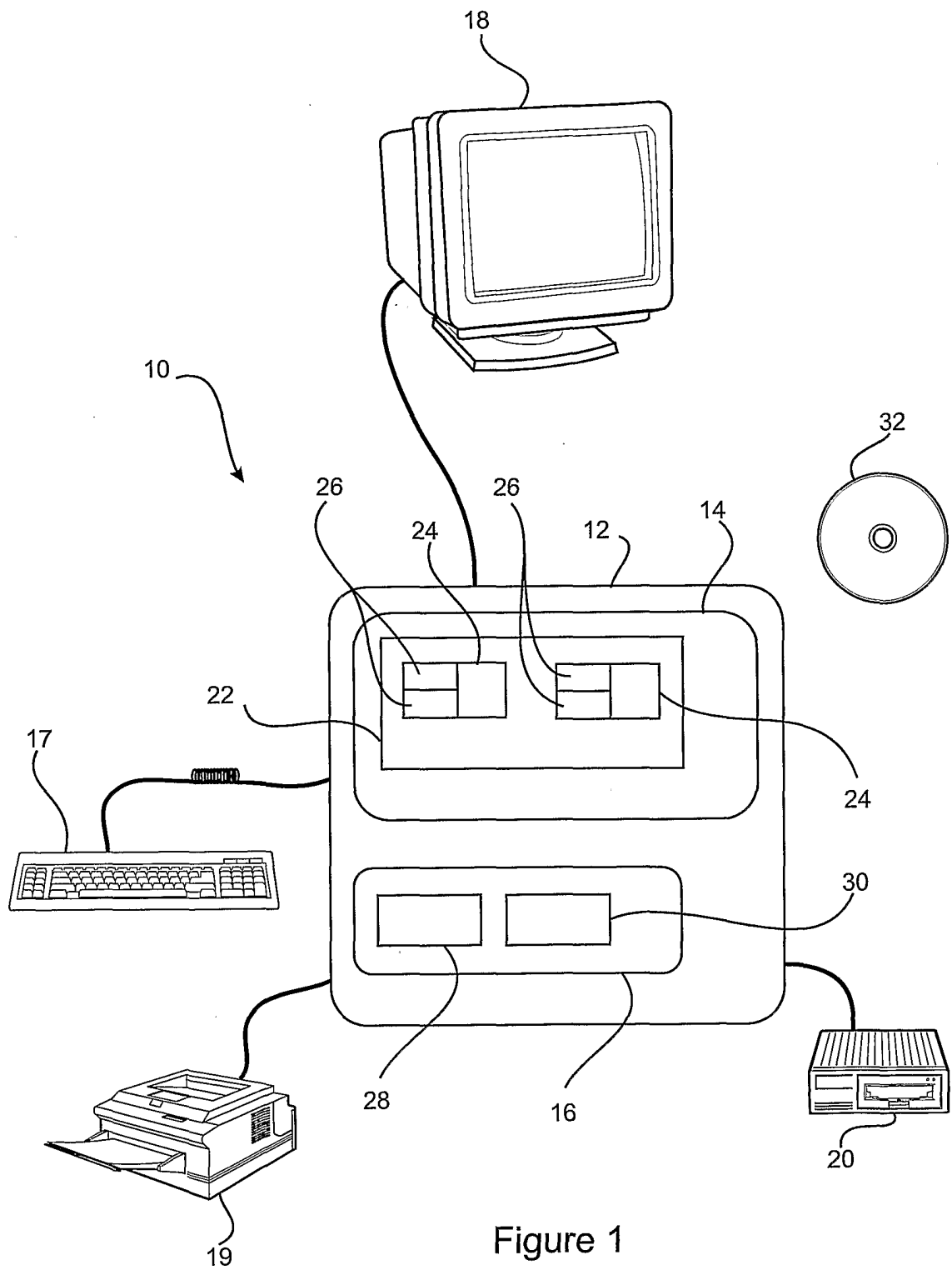


Figure 1

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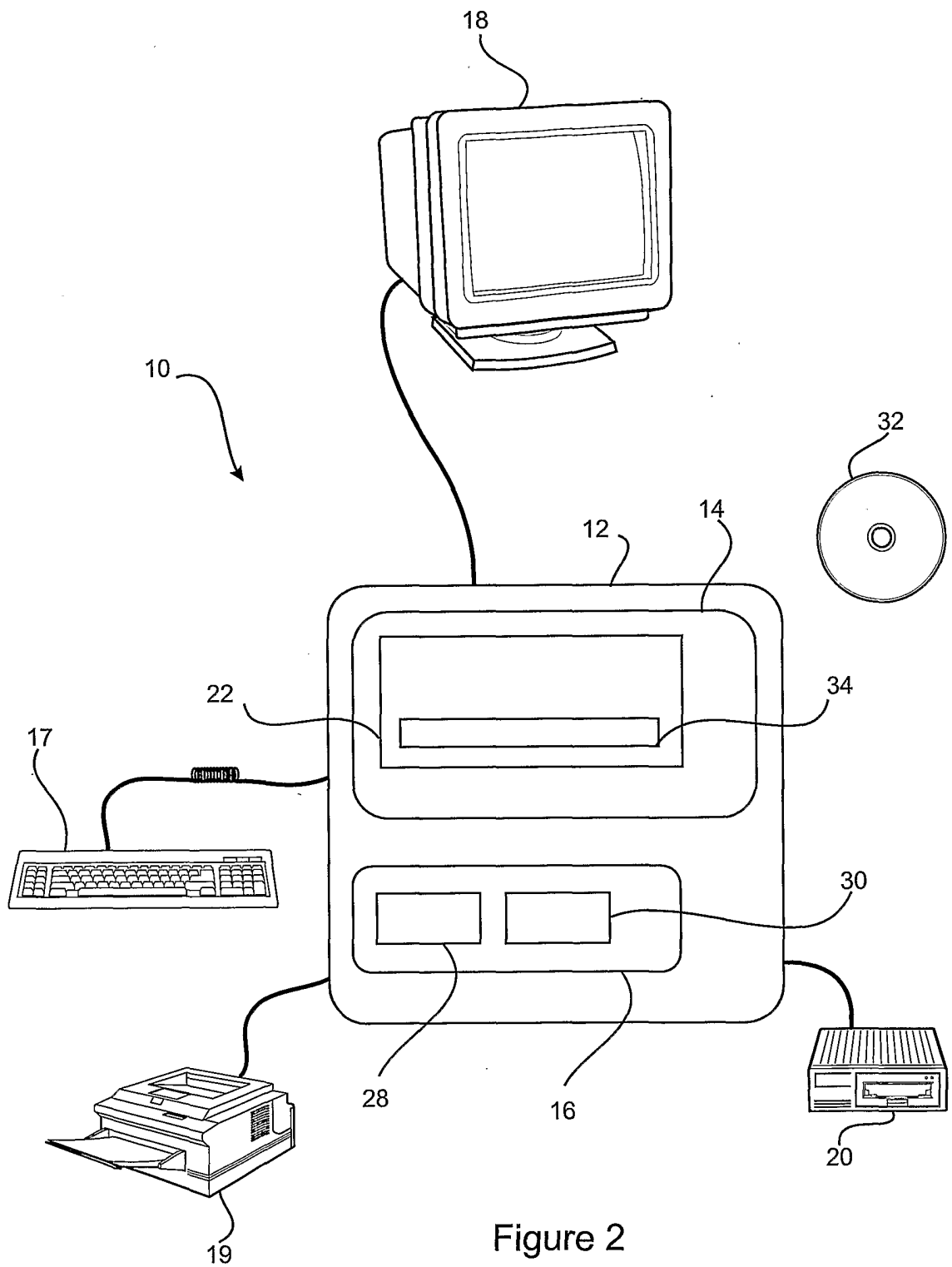


Figure 2

INTERNATIONAL SEARCH REPORT

International application No.
PCT/AU2005/001113

A. CLASSIFICATION OF SUBJECT MATTER

Int. Cl. ⁷: A63B 24/00, G09B 5/02, G06F 19/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
DWPI, USPTO, PCT (IPC: A61H, G09B, rehabilitation, physiotherapy, physical therapy, video, DVD, training, exercise, etc.)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,949,951 A (SKLAR et al), 7 September 1999 the whole document	1-37
X	US 2002/0082143 A1 (LEEDS), 27 June 2002 the whole document	1-37
X	US 2003/0059750 A1 (BINDLER et al), 27 March 2003 the whole document	1-37
X	WO 2001/016855 A2 (GETFIT.COM), 8 March 2001 the whole document (in particular, page 65, line 27 – page 66, line 7)	1-37

Further documents are listed in the continuation of Box C

See patent family annex

<p>* Special categories of cited documents:</p> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier application or patent but published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p>	<p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</p> <p>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</p> <p>"&" document member of the same patent family</p>
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Date of the actual completion of the international search
19 September 2005

Date of mailing of the international search report
22 SEP 2005

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/AU2005/001113

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	JP 2002-262229 A (MITSUBISHI CHEM CORP), 13 September 2002 the whole document	1-37
X	JP 2000-268118 A (FUJITSU GENERAL LTD), 29 September 2000 the whole document	1-37

INTERNATIONAL SEARCH REPORT

International application No. PCT/AU2005/001113

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report	Patent Family Member
US 5949951	AU 76738/96 US 6453111 WO 9717111
US 2002082143	AU 27777/00 CA 2313352 EP 1071062 JP 2001052079
US 2003059750	AU 93343/01 WO 0177952
WO 0116855	AU 67714/00
JP 2002262229	NONE
JP 2000268118	NONE
<p>Due to data integration issues this family listing may not include 10 digit Australian applications filed since May 2001.</p> <p style="text-align: right;">END OF ANNEX</p>	