



(11) **EP 2 022 537 A1**

(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication:
11.02.2009 Bulletin 2009/07

(51) Int Cl.:
A63B 21/00 (2006.01) A63B 24/00 (2006.01)

(21) Application number: **08161007.3**

(22) Date of filing: **23.07.2008**

(84) Designated Contracting States:
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR
Designated Extension States:
AL BA MK RS

- **Guidi, Jarno**
47023 Cesena (Forlì Cesena) (IT)
- **Venturi, Flavio**
40069 Zola Predosa (Bologna) (IT)
- **Fabbri, Mauro**
48020 Savio (Ravenna) (IT)

(30) Priority: **30.07.2007 IT BO20070532**

(74) Representative: **Lanzoni, Luciano**
Bugnion SpA
Via Goito 18
40126 Bologna (IT)

(71) Applicant: **Technogym S.p.A.**
47035 Gambettola (Forlì Cesena) (IT)

(72) Inventors:

- **Alessandri, Nerio**
47020 Longiano (Forlì Cesena) (IT)

(54) **Item of exercise equipment**

(57) An item of exercise equipment comprises an element (2) for performing a physical exercise, audio/video display means (3) and a processing unit (6) connected to the element (2) for performing a physical exercise. The processing unit (6) is also connected to the display means (3) to send to the latter at least a first signal (S1) representing a training programme and a second signal (S2) representing an entertainment programme, selection means (9) send a command to select an option associated with the first signal (S1) and/or the second signal

(S2) to the processing unit (6). The item of exercise equipment comprises a device (10) for receiving audio/video type data representing a plurality of entertainment programmes, to which an archive (100) of entertainment programmes can be connected, the receiving device (10) is designed to send to the processing unit (6) a plurality of signals (SP) representing the same number of entertainment programmes to activate the sending of the second signal (S2).

EP 2 022 537 A1

Description

[0001] The present invention relates to an item of exercise equipment.

[0002] In modern life which is increasingly rich with and full of all kinds of events, there is now almost no chance to stop and enjoy watching a particular film, listening to a particular collection of pieces of music, reading a good book or even a daily newspaper.

[0003] Therefore, people increasingly try to use the time spent doing one activity to simultaneously do another activity.

[0004] In particular, people increasingly try to use the time dedicated to looking after their body, which requires a certain degree of physical but not mental effort, to also carry out other recreational activities which in contrast require mental effort but no physical effort.

[0005] For this purpose there are prior art items of exercise equipment which have a display that can reproduce a film or a piece of music which can be selected from a plurality of films and pieces of music contained in a dedicated archive belonging to the item of exercise equipment.

[0006] However, even said items of exercise equipment do not allow the user to watch the particular film, listen to the particular piece of music or read the particular text he is particularly interested in.

[0007] Instead, said type of prior art item of exercise equipment obliges the user to settle for the entertainment (film or piece of music) which, amongst those available, is closest to what he is actually interested in.

[0008] In this context, the present invention has for an aim to make available an item of exercise equipment which allows, in addition to training, enjoyment of the entertainment that the user is particularly interested in, thus improving the effectiveness of the training session.

[0009] The technical characteristics of the invention, with reference to the above aim, are clearly described in the claims below, and its advantages are more apparent from the detailed description which follows, with reference to the accompanying drawings which illustrate a preferred embodiment of an item of exercise equipment in accordance with the present invention provided merely by way of example without restricting the scope of the inventive concept, and in which:

- Figure 1 is a schematic perspective view of the invention; and
- Figures 2 and 3 are block diagrams of several characteristics.

[0010] With reference to Figure 1, the numeral 1 denotes as a whole an item of exercise equipment in accordance with the present invention.

[0011] In the example embodiment described herein, the item of exercise equipment is an exercise bicycle, however, it could be a rowing machine, a treadmill or other item of exercise equipment.

[0012] The item of exercise equipment 1 comprises an element 2 for performing a physical exercise which, in the example in Figure 1 consists of a flywheel (not illustrated) driven by pedals.

5 [0013] The item of exercise equipment 1 also comprises audio/video display means 3 which preferably comprise a video screen 4 and one or more acoustic diffusers 5.

10 [0014] Both the element 2 for performing the physical exercise and the display means 3 are operatively connected to a processing unit 6.

[0015] In particular, as illustrated in the operating diagram in Figure 2, the processing unit 6 sends to the display means 3 at least a first signal S1 representing a training programme and a second signal S2 representing an entertainment programme. The display means 3 show the signals S1 and S2 sent on their video screen 4 in the form of predetermined icons 7, 8.

20 [0016] The item of exercise equipment 1 comprises selection means 9 for entering a command to select an option associated with the first signal S1 and/or with the second signal S2 and which send to the processing unit 6 a selection signal S3 representing the selected option.

25 [0017] In particular, in the preferred embodiment, the screen 4 is a touch screen, that is to say, allows functions to be activated by simply touching a predetermined portion of the screen.

[0018] Therefore, the selection means 9 are integrated in the screen 4 and generate the selection signal S3 once the user touches the icon 7, 8 corresponding to the signal S1, S2 representing the entertainment programme or the training programme.

30 [0019] When the training programme is activated, the processing unit 6 generates another plurality of signals, representing the various types of training which can be performed, which are again represented by icons on the screen 4 and which can be activated by the user.

[0020] The signals relating to the training programmes and their activation are of the known type and therefore are not described in further detail.

40 [0021] Advantageously, the item of exercise equipment 1 comprises a device 10 for receiving audio/video type data representing a plurality of entertainment programmes, to which an archive 100 of entertainment programmes can be connected.

45 [0022] The receiving device 10 is designed to send to the processing unit 6 a plurality of signals SP representing the same number of entertainment programmes as are present in the archive 100.

50 [0023] Sending of the signal SP activates sending of the second signal S2.

[0024] Thus, the signal S2 is not sent to the display means 3 if the receiving device 10 does not send the signal SP representing the availability of entertainment programmes.

55 [0025] The receiving device 10 consists of one or more "ports" to which one or more archives 100 can be connected.

[0026] In particular, said "ports" may be of the Universal Serial Bus type (commonly referred to using the acronym USB) and/or of the wireless type.

[0027] It is possible to connect to said ports archives 100 consisting of rewritable memories, such as USB keys, Hard Disks and the like, in which there are pieces of music, film footage, texts that the user wants to listen to, see or read while exercising.

[0028] In particular, when the selection signal S3 relating to the second signal S2 is received, the processing unit 6 is designed to send at least a fourth signal S4 to the display means 3 representing the plurality of signals SP sent by the receiving device (Figure 3).

[0029] The fourth signal S4 comprises sub-signals SM representing homogeneous groups of signals amongst the signals SP representing the plurality of entertainment programmes.

[0030] In other words, the fourth signal S4 comprises sub-signals SM which represent the type of content available in the archive 100 and which can be reproduced by the display means 3.

[0031] Said sub-signals SM are displayed on the screen 4 in the form of icons 11 representing the various content available, such as film footage, pieces of music or texts (Figure 3).

[0032] The selection means 9 are designed to generate a second selection command S5 for an option associated with the fourth signal S4, in particular with the icons 11. The processing unit 6 receives the second selection signal S5 representing the option selected and sends to the display means 3 a plurality of further signals (not illustrated) representing each data item which can be reproduced (for example, a list of pieces of music or film footage or texts).

[0033] When it receives the second selection signal S5 relating to the fourth signal S4, the processing unit 6 is designed to send to the display means 4 a fifth signal representing the start of displaying of the entertainment programme selected.

[0034] It must be emphasised that the entertainment programme selected and activated according to the methods described above can be interrupted at any moment, allowing the signal S1 to be reset and a change in the type of training to be performed.

[0035] Alternatively, it is possible not to interrupt the entertainment programme selected and activated and still to manage the training, using the display means 3.

[0036] Moreover, the processing unit 6 comprises a plurality of audio/video data encoding programmes, so as to be able to reproduce any data present in the archive 100 irrespective of its particular encoding.

[0037] The invention achieves the preset aim.

[0038] Indeed, thanks to the receiving device 10 interacting with the processing unit 6 and with the display means 3, a user can watch, listen to or read the desired film, piece of music or text.

Claims

1. An item of exercise equipment comprising:

- 5 - an element (2) for performing a physical exercise;
- audio/video display means (3);
- a processing unit (6) connected to the element (2) for performing a physical exercise, the processing unit (6) also being connected to the display means (3) for sending to the latter at least a first signal (S1) representing a training programme and a second signal (S2) representing an entertainment programme;
- 10 - selection means (9) for entering a command to select an option associated with the first signal (S1) and/or with the second signal (S2); the processing unit (6) receiving a selection signal (S3) representing the selected option;
- 15
- 20

the item of exercise equipment being **characterised in that** it comprises a device (10) for receiving audio/video type data representing a plurality of entertainment programmes, to which an archive (100) of entertainment programmes available to a user of the item of equipment can be connected; the receiving device (10) being designed to send to the processing unit (6) a plurality of signals (SP) representing the same number of entertainment programmes for activating the sending of the second signal (S2).

2. The item of exercise equipment according to claim 1, **characterised in that** when it receives the selection signal (S3) relating to the second signal (S2), the processing unit (6) is designed to send at least a fourth signal (S4) to the display means (3) representing the plurality of signals (SP) sent by the receiving device (10).

3. The item of exercise equipment according to claim 2, **characterised in that** the selection means (9) are designed to generate a command to select an option associated with the fourth signal (S4); the processing unit (6) receiving a second selection signal (S5) representing the selected option.

4. The item of exercise equipment according to claim 3, **characterised in that** when it receives the second selection signal (S5) relating to the fourth signal (S4), the processing unit (6) is designed to send to the display means (4) a fifth signal representing the start of displaying of the selected entertainment programme.

5. The item of exercise equipment according to claim 2, **characterised in that** the fourth signal (S4) comprises sub-signals (SM) representing homogeneous groups of signals amongst the signals (SP) repre-

senting the plurality of entertainment programmes.

6. The item of exercise equipment according to any of the foregoing claims, **characterised in that** the processing unit (6) comprises a plurality of audio/video data encoding programmes. 5
7. The item of exercise equipment according to any of the foregoing claims, **characterised in that** the receiving device (10) is a Universal Serial Bus type interface. 10
8. The item of exercise equipment according to any of the foregoing claims, **characterised in that** the receiving device (10) is a wireless type interface. 15
9. The item of exercise equipment according to any of the foregoing claims, **characterised in that** the first signal (S1) comprises a first icon (7) represented using the display means (3) and which can be selected using the selection means (9). 20
10. The item of exercise equipment according to any of the foregoing claims, **characterised in that** the second signal (S2) comprises a second icon (8) represented using the display means (3) and which can be selected using the selection means (9). 25
11. The item of exercise equipment according to claim 4, **characterised in that** the fourth signal (S4) is associated with a plurality of icons (11) represented using the display means (3), which can be selected using the selection means (9) and representing sub-signals (SM). 30
35
12. The item of exercise equipment according to any of the foregoing claims, **characterised in that** the audio/video display means (3) comprise a video screen (4) of the touch screen type and at least one acoustic diffuser (5). 40

45

50

55

FIG 1

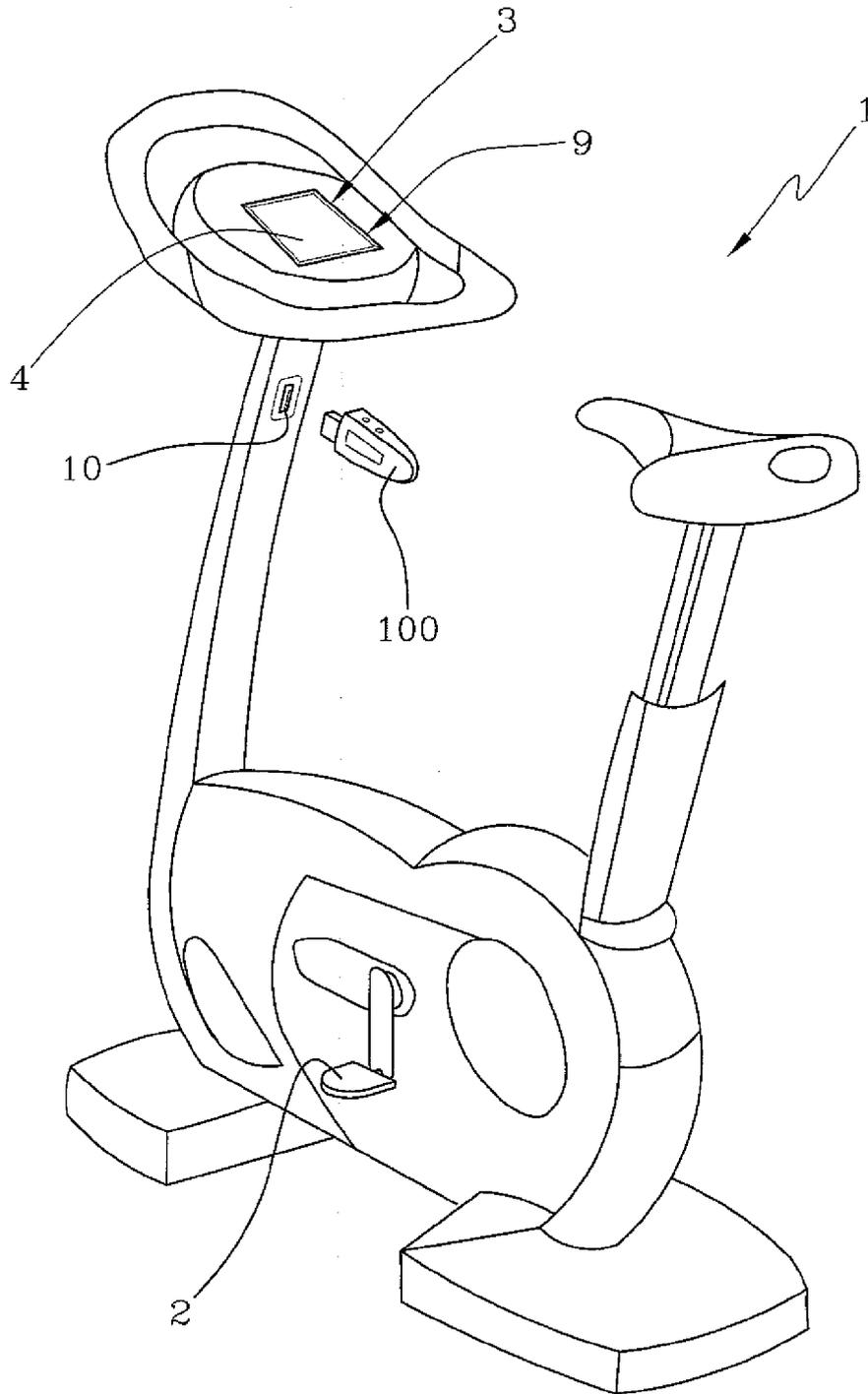


FIG 2

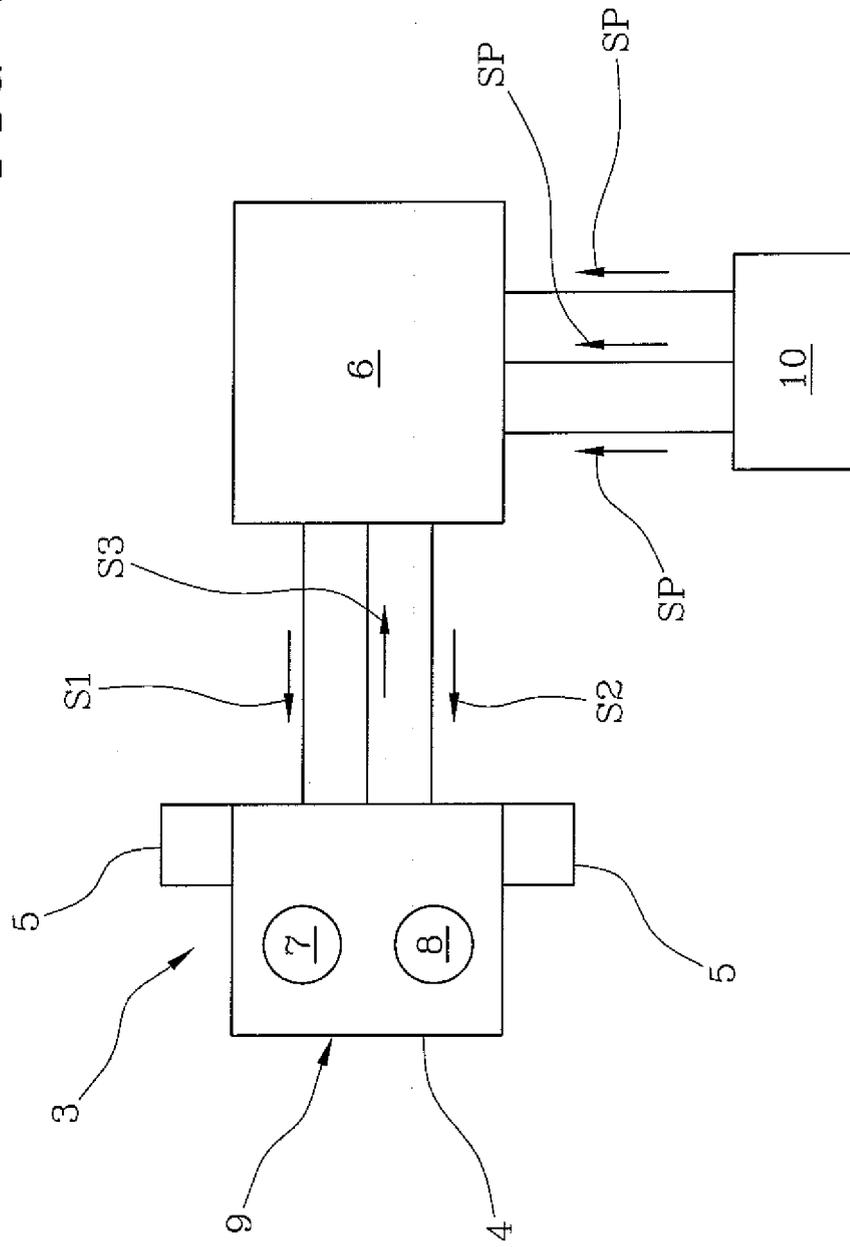
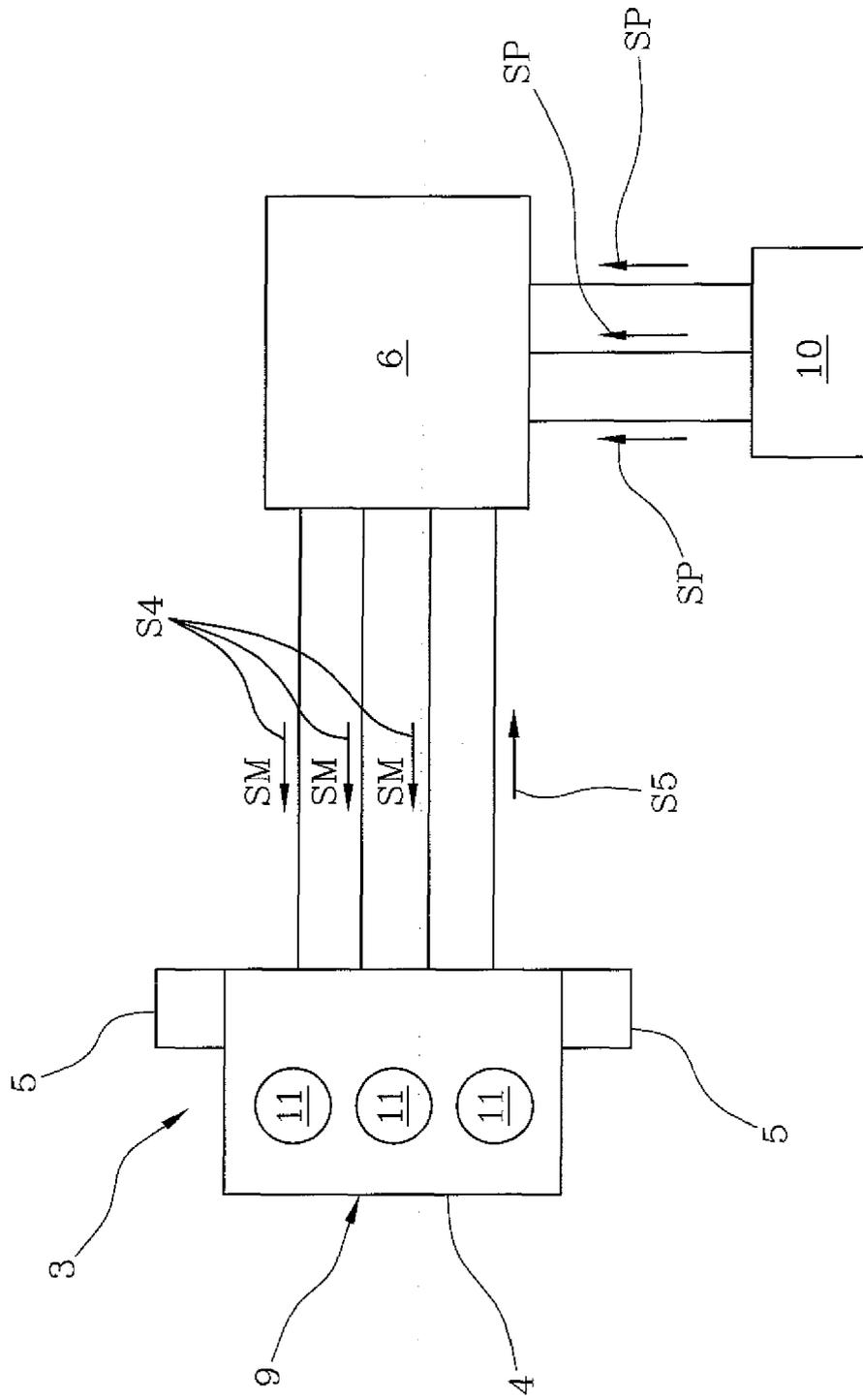


FIG 3





EUROPEAN SEARCH REPORT

Application Number
EP 08 16 1007

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	WO 03/082409 A (ICON IP INC [US]) 9 October 2003 (2003-10-09) * page 1, lines 33-35 - page 2, lines 1-5 * * page 4, lines 17-26 - page 11, lines 7-33 * * page 12, lines 13-21; figures * -----	1-11	INV. A63B21/00 A63B24/00
X	WO 01/12269 A (EPIX INC [US]) 22 February 2001 (2001-02-22) * page 5, lines 8-31 - page 6, lines 1-17; figures * -----	1-12	
X	US 2007/123390 A1 (MATHIS CHRISTOPHER E [US]) 31 May 2007 (2007-05-31) * paragraphs [0010], [0057] - [0061] * -----	1-12	
			TECHNICAL FIELDS SEARCHED (IPC)
			A63B
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 5 November 2008	Examiner Teissier, Sara
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

1
EPO FORM 1503 08 82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 08 16 1007

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

05-11-2008

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 03082409 A	09-10-2003	AU 2002349911 A1 CN 1622845 A EP 1487546 A1	13-10-2003 01-06-2005 22-12-2004
WO 0112269 A	22-02-2001	AU 7139700 A US 2002055418 A1	13-03-2001 09-05-2002
US 2007123390 A1	31-05-2007	NONE	

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82