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## **EUROPEAN PATENT APPLICATION**

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(71) Applicants:

· Yoshino, Shigeo Kita-ku, Kobe-shi, Hyogo 651-11 (JP)

· Yoshino, Koichi Kobe-shi, Hyogo 651-11 (JP) · Baker, Michiko Bellevue, WA 98004 (US)

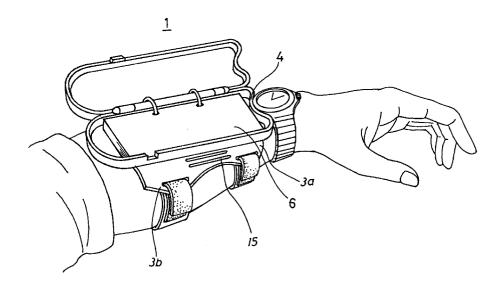
(72) Inventor: Yoshino, Koichi Kobe-shi, Hyogo 651-11 (JP)

(74) Representative: Merten, Fritz Tristanstrasse 5 90461 Nürnberg (DE)

#### (54)MEMO FOR FOREARM

A memo for forearm, which is a mount for an information recording device having a mounting portion capable of being easily mounted to a forearm by one hand, and a large detachable memorandum portion and which can incorporate thereinto a small-sized, convenient equipment and the like.

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#### Description

#### FIELD OF THE INVENTION

The present invention relates to a device to record information that can be attached to the user's arm. The typical user has to keep on standing and is unable to use both hands such as medical practitioners doctors, nurses, stockbrokers and so on.

#### **DESCRIPTION OF THE PRIOR ART**

Generally papers, tape-recorders, electronic equipments are used to record information, but none of them can be attached to the user's arm easily. Only a memo of paper attached to a wristband or to the back of a clockface have been devised. But the above memos have very little space for writing. They were used for recording simple things immediately for example telephone numbers, person's names, etc.

At present, occupations are becoming varied and many need to urgently and rapidly record things complicated and special. Accordingly conventional memos such as a small memo on the back of a clockface are no longer adequate.

And with conventional memos it was impossible to preserve individual sheets and difficult to insert them into a system note. It was simply inconvenient.

Furthermore, an operating room requires a virus-free condition, so such a virus-free memo is required. Moreover up until now, there has been no such memo as that can be attached to a calculator, watch, pager, portable telephone, clinical thermometer, stationary, stopwatch, electric lamp, battery, measure, compass, superminiature computer, superminiature word processor, superminiature cassette recorder, electronic notebook, mirror, conversion table, handy memo for travel etc. at the same time.

## SUMMARY OF THE INVENTION

The present invention has been made in consideration with the above points at issue we can easily put it on the forearm (between the elbow and the wrist) by one hand. Also the present invention offers a forearm memo which is large and removable and useful equipment is built into or attached to the base or cover.

So, the gist of the present invention is as follows; the forearm memo can be put between the elbow and wrist. It is equipped with a device to attach it to forearm shaped like a belt and an interlocking sliding device on both sides, the base of which (located on the elbow) is wider than that of the wrist, the memo cover is detachable from the base as well as the memo cover and the base with small useful equipment, for example, calculator, watch, pager, portable telephone, clinical thermometer, stationary, stopwatch, electric lamp, battery, measure, compass, superminiature computer, superminiature word processor, superminiature cassette

recorder, electronic notebook, mirror, conversion table, handy memo for travel which are made of dust-free material.

#### BRIEF DESCRIPTION OF THE DRAWINGS

Fig.1 is a summary explanatory drawing of the forearm memo which shows a working example of the present invention.

Fig.2 is a use phase diagram of the forearm memo of the present invention.

Fig.3 is a summary explanatory drawing to show the relation between the memo cover and the base of the forearm memo of the present invention.

Fig.4 is a summary explanatory drawing to show the relation between the memo cover of the forearm memo on the 3rd working example of the present invention and fitting equipment.

Fig.5 is a summary explanatory drawing to show the relation between the memo cover of the forearm memo on the 4th working example of the present invention and fitting equipment.

Fig.6 is a use phase diagram inside the memo cover on the 5th working example of the present invention.

Fig.7 is a whole perspective view to show the 6th working example of the present invention.

Fig.8 is a sectional decomposition side view to show the 7th working example of the present invention.

Fig.9 is a top view to show the 7th working example of the present invention.

Fig.10 is a top view to show the 8th working example of the present invention.

Fig.11 is a summary explanatory drawing to show the other working example of fitting method of the present invention.

# DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

The present invention is a forearm memo which is composed of the base, fitting portion such as attaching wristband, memo cover, scratch paper, and according to circumstance miniature useful equipment that can be attached to the user's arm device to record information. It is desirable that the material of the base be mostly resin, rubber, metal, glass and the like and the others flexible and easily fit the skin. As shown in Fig.1(4), the mode of the base is curved to avoid the projection of a wristwatch. Next, as a way of attaching the base to the user's arm, a belt-like device is desirable as shown in Fig.11, the way of interlocking the base to the arm is nice too. Moreover the material suitable for the belt-like device is a velcro, cloth, leather, rubber, or plastic band, which can be attached easily by one hand.

Especially it is suitable that made of uneven rubber and has a buckle for turn back which can be inserted, turned back and attached with velclo by one hand. These 3 ways of attaching the base and memo cover,

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can be considered: sliding them together on a rail, by magnet, or by velcro.

The memo cover can be taken off and the level part for putting scratch paper on is made flat. Moreover in Fig.1, the memo cover has a lid which divides the inside and outside and it is opened and shut by a hinge, but it does not limit the functions of the device and as shown in Fig.11, it is acceptable to have no lid or have it partially open.

Furthermore we believe it better to not use natural material instead dust-free non smoke material, such as plastic, aluminium, metal etc, should be used. When used for writing, we believe it better to use a pen or writing utensiles which does not produce dust and will avoid using one which scatters much corpuscle such as pencil

The forearm memo of the present invention is composed of a memo portion from wrist to elbow, so the user can have enough space to take notes. And the user can attach this memo with one hand, so when busy, the user can put it on or take it off easily.

Moreover the memo portion may be composed of memo paper or electronic equipment. And, even if the base is not used, only the fitting portion may be set under the memo cover or electronic equipment.

According to Fig.1, width A of the base stand (elbow side) is wider than width B (hand side). So using the base, it is stable on the arm. Furthermore, portion(4) curves inward so that there is no difficulty in wearing a watch. And the tip of portion (4) joint elbow side is round so as not to injure the skin when bending your arm.

Moreover, the memo cover is detachable. So it is possible to use a day planner at the same time. If necessary, it is also possible to attach a device or meter on the case and base making it possible to operate equipment while taking notes. This is accomplished by setting the equipment on the inner surface of memo cover.

These are explanations of the invention, the memo for forearm, on the basis of Figs.1 to 11.

#### A FIRST EMBODIMENT

Fig.1 is a summary explanatory drawing of the forearm memo to show the first embodiment. Fig.2 is a user phase diagram of the forearm memo.

Portion(1) is the forearm memo, portion(2) is the memo case, portion(3) is the base, portion(4) is the curving part and portion(5) is the wristband. Memo case(2) is attached to base(3).

Memo pads(6) in Fig.2 are kept inside the memo case(2). Base(3) is formed of a rubber-like material and narrow at the center. Wrist side(3a) is 7cm wide. Joint of the elbow side(3b) is 10cm wide so that it is wider than wrist side(3a). That way, when the forearm memo is attached to the arm in Fig.2, it will be firmly attached to the arm keeping the tension of the wristbands and the base(3). As base(3) is narrow at the center portion, it doesn't get in the user's way.

Wristband(5) is formed of a soft rubber-like material so as to shape itself to the arm. And velcro(18) are attached at both of its ends.

In this embodiment, the memo case is fixed to the base, only the memo is in the memo case and the groove(15) to put in writing utensils is set on the base beside the memo case in Fig.2.

The forearm memo makes it possible to take notes instantly while at work using both hands for example when performing surgical operations or operating equipment. The memo case doesn't drop and get in the way. If dust-free material is used, there is no problem to taking notes while seeing leukemia patients and like or while in the germ-free rooms during operations.

#### A SECOND EMBODIMENT

This embodiment is shown in Fig.3. The memo case is fixed by a plane magnet(7) to the base. Then, for example, it is possible to use the memo case for all kinds of operations and while around patients or to arrange memos of the day by inserting notes into another memo case for the next day.

#### A THIRD EMBODIMENT

This embodiment makes it possible to load useful miniature equipment and on the top of the memo case in the second embodiment by magnet.

Fig.4 shows this embodiment, in which a calculator(9), pocket paper(10) and clinical thermometer(11) are set into the memo cover(8) of the memo case(2).

As shown, it is very convenient to take notes and use equipment and the like which is set on the arm. There is no worry of losing them. It is possible to take notes or make calculations instantly, and register telephone numbers displayed on the pager and record patient's temperatures as measured by clinical thermometer. At present, most equipment is becoming superminiaturized making it possible to attach a wide variety of equipment.

### A FOURTH EMBODIMENT

Fig.5 shows the fourth embodiment of the present invention in which the slide rails(12) are set on the memo cover(8) of the memo case(2) beforehand and the grooves(13) corresponding to the slide rail(12) are set on the back of a micro computer(14) or micro word processor(14). Then, the micro computer and micro word processor are firmly fixed to the memo cover by sliding both fitted slide grooves. So there is no worry of dropping them even if the computer and the like are wider than the memo case.

In this embodiment, a micro computer is set on the memo case. But it is possible to set a computer on the base by setting a slide rail or riser rail on it directly. Since computers' have become so advanced recently it has 5

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become possible to refer or enter data by pen easily and memo pads are becoming outdated.

#### A FIFTH EMBODIMENT

In this embodiment, a calculator is set inside the memo cover(2') in order to make calculation and record them on the memo pad making it very convenient since there is no necessity to search for it.

#### A SIXTH EMBODIMENT

Fig.7 shows a sixth embodiment of the present invention in which a pen(16) and pen case(19) are set on memo cover. It is possible to pull out the pen by pressing output part(16a) with two fingers from both sides

In the present invention, it is also possible to arrange the necessary equipment and tools freely on base or memo case. It may be acceptable to make ring on uneven rubber band and a pen can be inserted in its ring. Various designs are possible. It is naturally possible to set writing tools inside the memo case in Fig.11.

#### A SEVENTH EMBODIMENT

Fig.8 and Fig.9 show a seventh embodiment of the present invention. In this embodiment, the memo case(2) is figured and covered with a transparent cover(17) made of glass or plastic. A pen case(17a) is set on this transparent cover(17). Seen in sectional form, the transparent cover has a little projection directed inwards on both ends(17b), (17c) in Fig.8. This makes it possible to attach the transparent cover to th memo case lid.

Using the transparent cover makes it possible to add a colorful design on the memo cover in Fig.8. And the design on the memo cover is enjoyed even if the pen case(17a) is set on memo cover.

#### A EIGHTH EMBODIMENT

In this embodiment, the transparent cover(17) is set on the memo case(2) in the seventh embodiment and a pen case and the like aren't set on the transparent cover.

Then, as shown in Fig.10, it is convenient to put a schedule and calendar between the cover and transparent cover or on a top of memo paper or on a half portion of the top of memo paper.

## POSSIBLE APPLICATION IN INDUSTRY

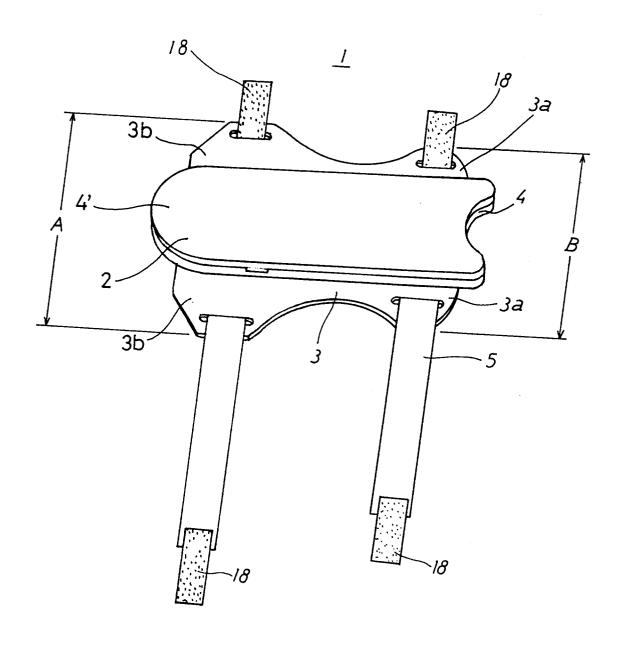
As described the above, the forearm memo in the invention is attached to the forearm easily. The memo portion is wide and detachable. Convenient equipment are set on memo cover or base so that it is convenient to take notes, calculate and measure using both hands.

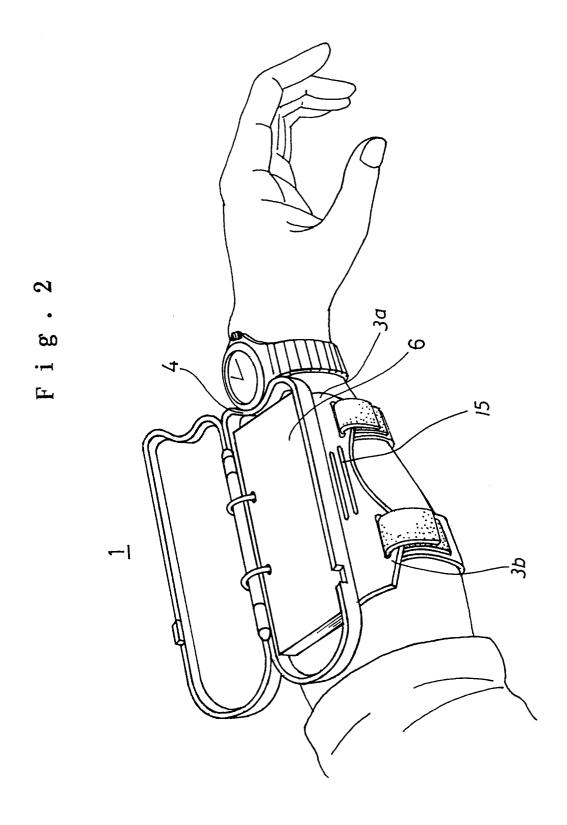
#### Claims

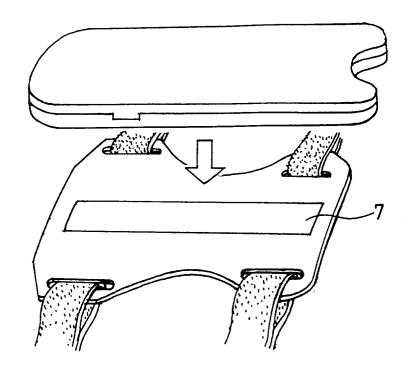
- A forearm memo comprising means for attaching the equipment to record information which can be set on the forearm from the elbow to the wrist easily by one hand.
- The forearm memo according to Claim 1, characterized by comprising a base, fitting portion, means for recording information.
- **3.** The forearm memo according to Claim 2, characterized in that the stand width of the elbow side being wider than wrist side.
- 4. The forearm memo according to Claim 2, characterized in that the means for recording information is comprising a memo pad, memo case and the means for writing.
- The forearm memo according to Claim 2, characterized by the means for recording information using electronic machines.
- 25 6. The forearm memo according to Claim 4, characterized by being able to attach small convenient equipment, for example, calculators, watches, pocketpagers, clinical thermometers, writing utensils, stopwatches, measuring devices, compasses, electronic notebook, microminiature computers, microminiature word processors and mirrors.
  - 7. The forearm memo according to Claim 6, characterized in which the fitting portion, the base, the memo case, the small useful equipment are all made of dust-free materials.

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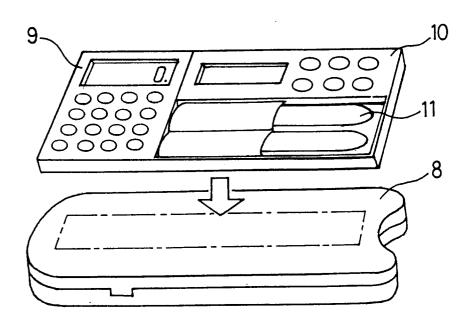
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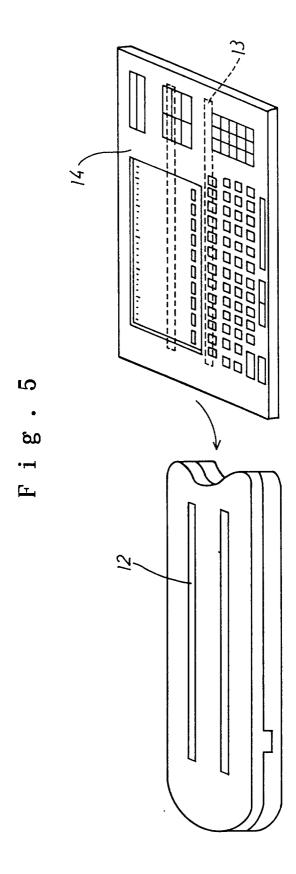




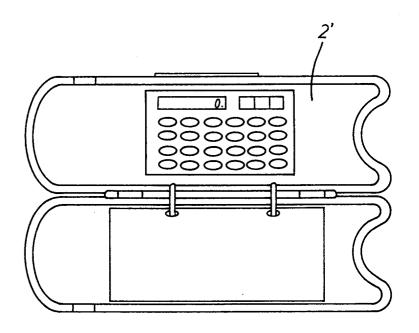


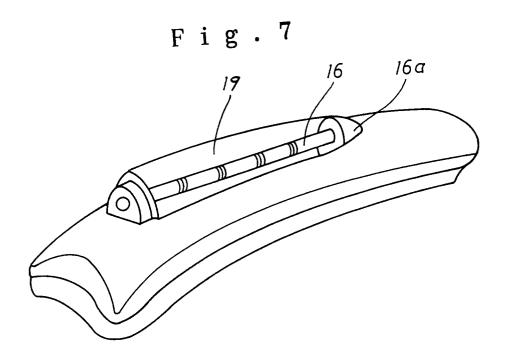
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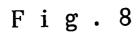


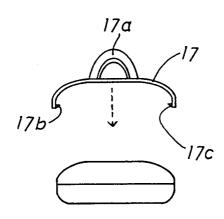


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F i g . 9

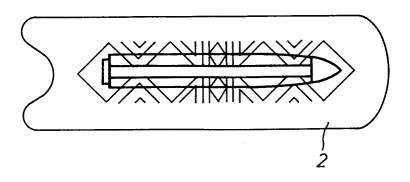


Fig. 10

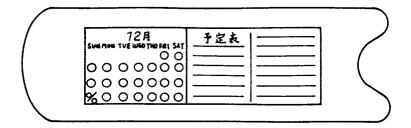
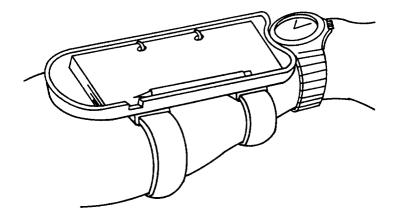


Fig. 11



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## INTERNATIONAL SEARCH REPORT International application No. PCT/JP95/02476 A. CLASSIFICATION OF SUBJECT MATTER Int. Cl<sup>6</sup> B43L3/00 According to International Patent Classification (IPC) or to both national classification and IPC FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) Int. Cl<sup>6</sup> B43L3/00 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Jitsuyo Shinan Koho 1922 - 1996 Kokai Jitsuyo Shinan Koho 1971 - 1996 Toroku Jitsuyo Shinan Koho 1994 - 1996 Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) C. DOCUMENTS CONSIDERED TO BE RELEVANT Category\* Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. JP, 57-19091, U (Osaka Gas Co., Ltd.), February 1, 1982 (01. 02. 82) (Family: none) Y JP, 1-97995, U (Yamada Gijutsu Kenkyusho K.K.), 4, 7 June 29, 1989 (29. 06. 89) (Family: none) Y JP, 2-58992, U (Michihiro Eto), 5 April 27, 1990 (27. 04. 90) (Family: none) Y JP, 56-74790, U (Yugen Kaisha Tokai Shobo Kizai 6 June 18, 1981 (18. 06. 81) (Family: none) Further documents are listed in the continuation of Box C. See patent family annex. Special categories of cited documents: later document published after the international filing date or priority date and not in conflict with the application but cited to understand document defining the general state of the art which is not considered the principle or theory underlying the invention to be of particular relev "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 "E" earlier document but published on or after the international filing date "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) 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 document referring to an oral disclosure, use, exhibition or other document published prior to the international filing date but later than the priority date claimed "&" document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report March 5, 1996 (05. 03. 96) February 16, 1996 (16. 02. 96) Name and mailing address of the ISA/ Authorized officer Japanese Patent Office Facsimile No. Telephone No.

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