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(73) Proprietor: **Kohno, Yukio**
Funabashi-shi, Chiba-ken (JP)

(72) Inventor: **Kohno, Yukio**
Funabashi-shi, Chiba-ken (JP)

(74) Representative: **Schwan, Gerhard, Dipl.-Ing.**
D-81739 München (DE)

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Description

FIELD OF THE INVENTION

This invention relates to an analog world clock or watch and particularly to an analog world clock or watch excellent in the sense or function as a clock or watch which indicates the present time of a specified area (nation or city) in the world in a conventional manner while permitting to read therefrom the local times of other areas (nations or cities) different in time in the world.

BACKGROUND OF THE INVENTION

Conventional analog clocks or watches (comprehensively called hereinafter clock including watch) generally used are ones that solely indicate the present time only of a specified area in the world where they are used. They usually indicate a time on the dial face by allowing to rotate the long or minute hand and the short or hour hand around its axis in the right-handed rotation.

But, at the present day when opportunities of seeing and hearing matters and informations in the world or of traveling throughout the world have been increased, an interest has been felt to a world clock capable of indicating the present time of a specified area in the world and simultaneously capable of indicating the local times of other various areas in the world different in time.

Although several clocks have been proposed with respect to such world clocks (for example Japanese Utility Model Application Publication No. 63-15827), most of them were limited to table clocks or wall clocks and gave a different impression from conventionally prevailing ordinary clocks and failed to give the indication that is easy to see and read.

Among such world clocks, there has been known a clock which can indicate the local times of main countries and cities in the world the names of which are expressed on a world map depicted at its center. An example of such world clock is shown in Fig. 3. As shown therein, this world clock is one of the type wherein in addition to a usual fixed dial 1 around which the long hand 3 and the short hand 5 rotate in the right-handed rotation, a nation/city name indicating rotation disc 7 is provided in the inner side of the fixed dial 1. The disc 7 has a world map in its center portion and marks of difference in time for indicating the names of main nations and cities in the world around its circumference. The fixed dial 1 has double indication marks A and B. The indication mark A is adapted to express the present time of a specified area (for example Japan) where the clock is used by the short hand and is usually expressed as 1 to 12 times. On the other hand, the indication mark B as being in the inner side of the indication mark A is adapted to express the local times of 1 to 24 times in the world. The disc 7 is rotated in the right-handed rotation at 1 rotation/day (RPD). By this clock, one can read the present time of the specified area where the clock is used (for example Japan) from locations the short hand 5 and the long hand are indicating and simultaneously one can read the local times of any interested nations or cities from the indication mark B on the fixed dial corresponding to the locations of the specific marks of difference in time of the nation/city indicating rotation disc 7. In Fig.3, the clock indicates 8:00 a.m. on the indication mark A as the present time in Japan and if one wants to know the local time in New York, one can read the local time as 18:00 p.m. from the time expression on the indication mark B corresponding to the location of New York on the nation/city indicating rotation disc 7.

The above world clock, however, has the following disadvantages:

(1) Since the indication mark A indicating the present time of a specified area and the indication mark B indicating the local time in the world are not consistent with each other in their respective time expressions, one can not simply and easily read them. In Fig. 3, the clock indicates 8:00 a.m. in Japan on the indication A by the short hand, but the local time expression "8:00" on the indication mark B indicated by mark of the difference in time corresponding to Japan on the nation/city indicating rotation disc 7 is intermediate between the long and short hands. In a word, the location of present time "8:00" of Japan on the indication mark A and the location of the local time "8:00" of same Japan on the indication mark B are not coincident. Such inconsistence of the location of of Japan as the mark of the difference in time and the location of the short hand gave a strange feeling to one who uses this clock. It is easier and is convenient to read that the location of the present time of a specified area (for example Japan) is indicated by the short and long hands and that simultaneously the location of mark of difference in time corresponding to that area (for example Japan) on the rotation disc by which the local time of that area in the world is indicated is aligned with the location of the short hand. When a world clock is designed in such manner that the present time of a specified area (for example Japan) in the world and the local time in the world of that specified area are indicated at the same site by the short hand, it can be called a world clock in the true sense.

(2) In addition, the clock as shown in Fig. 3 is manufactured solely taking the use in a specified area (here Japan) only into consideration, and so when one wishes to use it at a different nation or city (for example New York), the clock cannot function as a world clock at New York. Specifically, it is very difficult to change a specified area inherent to that clock to another specified area.

These are due to the facts that the fixed dial 1 has a fixed double indication marks A and B of indicating the present time of a specified area and a local time in the

world of the specified area, respectively and that the relative relation between the fixed dial 1 and the rotation disc 7 is difficult to be readjusted. After all, it is a fatal that the local time indication mark B is fixedly provided.

An analog world clock as specified in the pre-characterizing portion of claim 1 is known from US--A-2 615 298. In US-A-2 615 298 a world clock comprising a fixed dial having gradations for indicating the present time of a specific area on twelve hour basis is described. This prior world clock further comprises a first rotary disc showing a world map, which disc is rotatable in clockwise direction at 2 RPD. The peripheral profile of the first disc comprises 24 points or indices equally spaced apart from each other on the prolongations of 24 normal meridians. Besides, the prior world clock is provided with a second rotary disc rotatable in clockwise direction at 1 RPD for expressing 24 local times in the world. One of the 24 points or indices provided at the periphery of the first disc is longer and more prominent than the other 23 further points or indices. The present local time of a specific area is indicated by the cooperation of the fixed dial with this more prominent index of the first disc (which index constitutes a substitute for the usual short hand of an ordinary analog clock) and with a long hand (minute hand).

In the analog world clocks disclosed in CH-A-283 822 and CH-A-270 584 the dial having graduations for indicating the present time on twelve hour basis as well as the disc showing a world map are stationary. A local time indicating rotory disc is rotated at 1 RPD in the counterclockwise direction.

All these prior art clocks deviate from ordinary clocks with respect to their design and/or are not easy to read.

OBJECT OF THE INVENTION

The object of this invention is to provide a world clock which has an excellent sense or impression as a world clock by eliminating the shortcoming (1) mentioned above found in the conventional world clock as shown in Fig. 3 and which may be flexibly reset or readjusted as a world clock mainly usable at any specified area (nation or city) in the world so as to indicate the present time specifically for that specified area in response to the aforementioned requirement (2).

SUMMARY OF THE INVENTION

The present invention provides an analog world clock comprising:

(a) a fixed dial having gradations for indicating the present time of a specific area specified on twelve hour basis, combined with a long hand being rotable in clockwise direction about a center and extending radially from said center,

(b) a first rotatory disc which is rotatable in clockwise direction at 2 RPD,

(c) a second rotatory disc for indicating local times in the world, which dis is rotatable in clockwise direction at 1 RPD, and

(d) said fixed dial, first rotatoary disc and second rotatory disc being superposed in a concentric relation,

characterized in that

said fixed dial has said long hand and a short hand, the hort hand likewise being rotatable in clockwise direction about the center and extending radially from said center, whereby the analog clock can indicate said present time entirely as in ordinary analog clocks; and

said first rotary disc is a nation/city name indicating disc for indicating the names of nations and cities in the world, which disc has around its circumference indication marks for expressing the respective differences in time between them and

said local time indicating disc has around its circumference indication marks for expressing the local times of the nations and cities in the world and

said short and long hands are set to indicate the present time of the specified area on the fixed dial, and said nation/city name indicating rotatory disc and local time indicating rotatory disc are so set that a specific indication mark of the difference in time for expressing the specified area on the nation/city name indicating rotatory disc and a specific local time indication mark for indicating the local time on the local time indicating rotatory disc of said specified area are coincident with the present time on the fixed dial of the specified area indicated by the short hand; and

said nation/city name indicating rotatory disc being rotatably adjustable so that the position of the specified indication mark can be changed with regard to said fixed dial for expressing the difference in time of another area when said specific area is changed to another area,

whereby said analog world clock holds the appearance as in ordinary analog clocks having the long and short hands radially extending from the center and can indicate the present time of a specific area while expressing the local times in the world in resettable manner.

The analog world clock of the subject invention thus is provided with a nation/city name indicating rotation disc (called M disc hereinafter) and a local time indicating rotation disc (called R disc hereinafter) in addition to an

ordinary fixed dial indicating the present time of a specific area as in a conventional analog clock. They are set in such manner that time expressions of the present time of a specified area on the fixed dial and of the local time on the R disc of that specified area are coincident with each other and further the mark of the difference in time of that specified area is also aligned with that coincident location. The M disc and the R disc are rotated in the right-handed rotation at 2 RPD and 1 RPD, respectively. By allowing the location of the M disc relative to the fixed dial or the R disc to be adjustable as desired, it becomes possible to change a specified area where that clock is chiefly used as desired.

In conformity with a further development of the subject invention it is possible to depict on said nation/city name indicating rotation disc a world map 360° developed centering on the Antarctica.

It is convenient to designate any distinction between day and night on the local time indication marks on said local time indicating disc.

By providing said local time indicating rotation disc (R disc) separate from the nation/city name indicating rotation disc (M disc) and by rotating the M disc and R disc in the right-handed rotation at 2 RPD and 1 RPD, respectively, the present time of a specified area (for example Japan) is always made be to be coincident with the local time of that specified area (for example Japan) indicated by the specific mark of difference in time of that specified area. Further, in any nation or city (for example New York), the clock may be so readjusted that as to function as a world clock which may be chiefly used there.

BRIEF EXPLANATION OF THE DRAWINGS

Fig. 1 is a top view of an embodiment of a display or indication portion of a world clock having a nation/city name indicating rotation disc with a world map depicted thereon and a local time indicating rotation disc according to this invention.

Fig. 2 is a modification of Fig. 1 wherein code numbers are correspondingly indicated instead of nation/city names on the nation/city indicating rotation disc.

Fig. 3 is a top view of a display or indication portion of a previously known world clock.

EXPLANATION OF EMBODIMENTS

The time indicating mechanism according to this invention is applicable to anyone of clocks and watches including a desk clock, wall clock, arm watch, ticker etc.

Explanation will be made herein taking a commonly popularizing analog type portable watch or clock (call hereinafter clock). Fig. 1 shows a display or indication portion of such clock. Around the circumference of a fixed dial 1, an ordinary time expression as found in ordinary analog clocks are provided. That is, the fixed dial 1 has time indication marks divided into sixty with a thick mark every five marks. The time expression (figures) of 1 to 12 are indicated in order on respective thick marks in righthanded rotation with 12 being the top. Needless to say, the clock indicates the present time of a specified area selected (here Japan) where the clock is placed or carried by the locations indicated by the short hand 5 and the long hand 3. Needless to say, the short hand 3 is rotating in the right-handed rotationat 2 RPD and the long hand 3 is rotating also in the right-handed rotation at 1 RPH (rotation per hour). The second-hand may be provided although not shown here.

In this specification and claims, the term "fixed dial" includes all of the time indication portions in existing analog clocks other than one as shown. The fixed dials in a variety of indication manners or types have been known for decorative purpose or easier reading purpose, and any thereof is not precluded from using.

This invention provides, on the basis of an ordinary analog clock having a fixed dial as stated above, a novel world clock which eliminates aforementioned shortcomings and is flexible from the viewpoint capable of changing a specified area selected for main use as desired by providing a nation/city name indicating rotation disc (M disc) 7' and a local time indicating rotation disc 9 (R disc) rotating in a concentric relation as explained below.

①Nation/City name indicating rotation disc (M disc) 7'

This has indication marks for expressing difference in time of main nations and cities in the world around its circumstance and is rotating in the right-handed rotation at 2 RPD. This M disc serves to move the location of the mark of the difference in time of a specific area specified concurrent with the ordinary motion of the short hand which means that the M disc is equivalent to the short hand itself in its motion. The present time of a specified area is indicated by the time expression on the fixed dial 1 indicated by the mark of difference in time corresponding to that specified area together with the short and long hands.

Preferably, on the M disc 7', a world map centering on the Antarctica based on difference in time and a date line etc. may be depicted together with associated decorations such as the national flags etc..

A world map centering on the Antarctica is suitable for ordinaryright-handed clock since it is easier to read and is more excellent in decoration relative to one centering on the North Pole in view of the fact that continents and islands are well dispersed in harmony in the whole centering on the Antarctica which is relatively smaller than the Arctic regions.

The M disc includes a disc form made of a wire-work or the like.

②Local time indicating disc (R disc) 9

Separate of the M disc, this R disc positioned. This has its circumferential local time indication marks for expressing local times of main nations/cities in the world

around the circumference and rotates in the right-handed rotation at the rate of 1 RPD and is positioned so that one can read the local time indication marks around the periphery of the M disc. The local time indication marks are expressed by dividing its circumference by 24 (by 15°) with 1 to 12 figures every a half circle or with 1 to 24 figures through a complete circle. A part of these figures may be skipped or jumped over for simplicity. The local time indication marks are provided as expressing the standards times in respective nations /cities on disc 7' aligned therewith.

It is also very convenient to designate any distinction of day and night by white and black colorings etc.. In Fig. 1, for easier distinction of day and night, a half from 6:00 a.m. to 6:00 p.m. is designated as black colored figures in white background (day) and the remaining half of from 6:00 p.m. to 6:00 a.m. is indicated as white colored figures in the black background (night). The distinction boundary of day and night is not specified to 6:00 to 6:00 and may be distinct as 7:00 to 7:00 for example as desired to comply to the circumference of a specified area. Other kind of lightened and darkened colors may be used instead of the white and black colors.

These M disc 7' and R disc 9 are set so that with the time expression of the present time in a specified area as being indicated by the short hand, the specific indication mark of the difference in time of said specified area on M disc 7' and the specific local time indication mark corresponding to said specified area are coincident.

Specifically, as shown in Fig. 1, assuming that the present time in Japan is 8:00 a.m. as being indicated on the fixed dial 1 by the short and long hands, the the local time indication mark of "8:00 a.m." on the disc 9 is set to be coincident to that short hand location and also the mark of the difference in time corresponding to "Japan" on the M disc 7' is allowed to be coincident to that 8:00 a.m. location of the short hand.

Although the M disc and the R disc are shown smaller than the fixed dial in Fig. 1, it is, of course, possible to design so that they are rendered larger than the fixed dial, namely their indication marks are outward around the fixed dial.

In the embodiment as shown, the R disc is mounted so that it is interposed above the fixed dial and below the M disc so that the local time indication marks of the R disc appear between the indication marks of the fixed dial and the indication marks of the M disc.

In the case where the clock of this invention is used in Japan, it is necessary to align the specific mark of the difference in time corresponding to Japan on M disc with the location of the present time in Japan as being indicated by the short hand. This may be accomplished by fixedly fitting the M disc around the shaft of the short hand or other suitable means in the time of manufacturing of the clock.

In order to change this specified area from Japan to another specified area (for example New York), it is only required to get readjusted the fixed location of M disc relative to the shaft of the short hand in a service station or repair section to conform to that changed area .

Otherwise, by adjusting the rotational location of the M disc with an external lever, one can adjust himself the location of the specified area. This may be easily done by those skilled in the art by composing double mounts of a first mount by which the short hand is fixed to the shaft of the short hand and a second rotatable mount by which the M disc is rotatably mounted around the the first mount. Such mechanism may be easily made by those skilled in the art as in a similar manner as the adjusting mechanism of the long and short hands.

The short hand must indicate the location where the present time of Japan on the fixed dial and the local time of Japan in the world on the R disc are coincident with each other. Assuming the present time of Japan is 8:00 a.m., the short hand is set to "8" and the long hand is set to "12" on the top. In that case, the indication mark of "8 (a.m.)"-herein black colored figure in the white background - is allowed to be coincident with that "8" time location of the fixed dial. The local times in various nations and cities in the world can be read from the time expressions of indication marks on the R disc indicated by the respective indication marks of difference in time of their nations and cities. For example, in Fig. 1, Honolulu is at 1:00 p.m. and New York is at 6:00 p.m..

The time expressions on the basis of "minute" unit indicated by the long hand is the same only in areas having the difference in time of every 1 hour unit from Japan. In the areas where their difference in time are at 30 minutes or others, one can read by appropriately estimating with one's eye from the time expression of "minute" indicated by the long hand.

When one carries this clock oneself to New York and chiefly stay there, the location of the M disc to the shaft of the short hand is readjusted or otherwise the mark of the difference in time corresponding to New York on the rotation disc 7' may be aligned to the time expression on the fixed dial as expressing the present time of New York. Thus, this world clock may be changed to a world clock in any area where this clock is chiefly used.

In short, the M disc is one that allows the indication mark of the difference in time corresponding to a specified area to move in the same manner as in the short hand. The M disc itself is equivalent to the short hand in its motion. The present time of a specified area on the M disc is indicated on the time expression on the fixed dial and also on time indication mark on the R disc indicated by the indication mark of that area on the M disc. The R disc indicates the local times of main nations and cities in the world including a specified area expressed by the M disc. Thus, one can the local times in the world at a look.

In the case where the M disc is obliged to be in a small size as in a hand watch, only the names of main nations and cities may be expressed on the M disc or a series of code numbers marked following the difference in time starting from the day line (0 to 23) only may be

expressed. The use of either or both of them with or without a world map is not prevented. Fig. 2 illustrates a display or indication portion of a clock having a M disc with a world map and code numbers thereon. The code numbers correspond to the names of main nations and cities in Fig. 1. In this connection, the code No. 0 indicates Wellington, the code No. 2 Canberra, the code No. 3 Japan and Seoul, No. 10 New York ans Athens, ----- the code No. 22 Honolulu. The clock of Fig. 2 is identical to that in Fig. 1 in the other points.

The differences in time are generally in the intervals of one hour, but there are areas which have the differences in time of 30 minutes or others. In the case of 30 minutes, the the difference in time is marked in the location deviated 7.50 degree. With respect to other differences in time, it is only required that the marks are made correspondingly deviated depending on the respective the difference in time.

In this invention, the short hand may be eliminated. As stated above, the M disc is one that allows the mark of the difference in time corresponding to a specified area to move in the same manner as in the short hand. The M disc itself moves as if it is the short hand. Therefore, the short hand is eliminated and therefore its function can be substituted by the M disc. In the case where the M disc is allowed to be function as the short hand, the mark of the difference in time corresponding to a specified area functions as the short hand. It is convenient to express that mark remarkably distinguished from the other marks.

Further, in a period while a summer time is adopted, it is convenient to exchange a M disc in which marks of the difference in time are correspondingly deviated toward the summer time expression. This invention comprehends such embodiment.

ADVANTAGES OF THE INVENTION

Since the present time in a specified area and the local time in the world of that specified area can be read in the same site through the coincidence of indication marks interested on the R disc and the M disc, the clock of this invention is excellent in the sense and function of a world clock. The clock of this invention provides a flexible world clock in the point that in any nation or city, the clock may be so adjusted that it functions as a world clock which may be chiefly used there.

Claims

1. An analog world clock comprising:

(a) a fixed dial (1) having gradations for indicating the present time of a specific area specified on twelve hour basis, combined with a long hand (3) being rotable in clockwise direction about a center and extending radially from said center,

(b) a first rotatory disc (7') which is rotatable in clockwise direction at 2 RPD (rotation per day),

(c) a second rotatory disc (9) for indicating local times in the world, which disc is rotatable in clockwise direction at 1 RPD (rotation per day).

(d) said fixed dial (1), first rotatory disc (7') and second rotatory disc (9) being superposed in a concentric relation,

characterized in that

said fixed dial (1) has said long hand (3) and a short hand (5), the short hand likewise being rotatable in clockwise direction about the center and extending radially from said center, whereby the analog clock can indicate said present time entirely as in ordinary analog clocks; and

said first rotary disc (7') is a nation/city name indicating disk for indicating the names of nations and cities in the world, which disc has around its circumference indication marks for expressing the respective differences in time between them and

said local time indicating disc (9) has around its circumference indication marks for expressing the local times of the nations and cities in the world and

said short and long hands (3, 5) are set to indicate the present time of the specified area on the fixed dial (1), and said nation/city name indicating rotatory disc (7') and local time indicating rotatory disc (9) are so set that a specific indication mark of the difference in time for expressing the specified area on the nation/city name indicating rotatory disc and a specific local time indication mark for indicating the local time on the local time indicating rotatory disc of said specified area are coincident with the present time on the fixed dial of the specified area indicated by the short hand (5); and

said nation/city name indicating rotatory disc (7') being rotatably adjustable so that the position of the specified indication mark can be changed with regard to said fixed dial (1) for expressing the difference in time of another area when said specific area is changed to another area,

whereby said analog world clock holds the

appearance as in ordinary analog clocks having the long and short hands (3, 5) radially extending from the center and can indicate the present time of a specific area while expressing the local times in the world in resettable manner.

2. The analog world clock as claimed in claim 1 wherein said nation/city name indicating rotatory disc (7') depicts thereon a world map 360° developed centering on the Antarctica.

3. The analog world clock as claimed in claim 1 wherein any distinction between day and night is designated on the indication marks for expressing local times in the world of said local time indicating disc (9).

4. The analog world clock as described in claim 1 wherein said nation/city name indicating rotatory disc (7') depicts thereon a world map 360° developed centering on the Antarctica and any distinction between day and night is designated on the indication marks for expressing local times in the world of said local time indicating disc (9).

Patentansprüche

1. Analoge Weltzeituhr mit:

(a) einem feststehenden Zifferblatt (1), das Einteilungen zur Anzeige der gegenwärtigen Zeit einer bestimmten Region auf Zwölfstundenbasis in Verbindung mit einem langen Zeiger (3) aufweist, der um ein Zentrum im Uhrzeigersinn drehbar ist und sich von diesem Zentrum radial wegerstreckt,

(b) einer ersten Drehscheibe (7'), die im Uhrzeigersinn mit zwei RPD (Umdrehungen pro Tag) drehbar ist,

(c) einer im Uhrzeigersinn mit 1 RPD (Umdrehung pro Tag) drehbaren zweiten Drehscheibe (9) zur Anzeige von lokalen Zeiten in der Welt,

(d) wobei das feststehende Zifferblatt (1), die erste Drehscheibe (7') und die zweite Drehscheibe (9) konzentrisch übereinander angeordnet sind,

dadurch gekennzeichnet, daß

dem feststehenden Zifferblatt (1) der lange Zeiger (3) und ein kurzer Zeiger (5) zugeordnet sind, wobei der kurze Zeiger gleichfalls im Uhrzeigersinn um das Zentrum drehbar ist und sich von diesem Zentrum radial wegerstreckt, wodurch die analoge Uhr die gegenwärtige Zeit ganz wie bei gewöhnlichen Analoguhren anzeigen kann; und

die erste Drehscheibe (7') eine Staaten-/Ortsnamen-Anzeigescheibe zur Anzeige der Namen von Staaten und Orten in der Welt ist, die um ihren Umfang herum mit Anzeigemarken zum Ausdrücken der betreffenden Zeitunterschiede zwischen diesen versehen ist, und

die Lokalzeit-Anzeigescheibe (9) um ihren Umfang herum mit Anzeigemarken zum Ausdrücken der Lokalzeiten der Staaten und Orte in der Welt versehen ist, und

der kurze und der lange Zeiger (5, 3) so eingestellt sind, daß sie die gegenwärtige Zeit der bestimmten Region auf dem feststehenden Zifferblatt (1) anzeigen, und die Staaten-/Ortsnamen-Anzeigedrehscheibe (7') und die Lokalzeit-Anzeigedrehscheibe (9) so eingestellt sind, daß eine bestimmte Zeitunterschieds-Anzeigemarke für die bestimmte Region auf der Staaten-/Ortsnamen-Anzeigedrehscheibe und eine bestimmte Lokalzeit-Anzeigemarke zum Anzeigen der Lokalzeit auf der Lokalzeit-Anzeigedrehscheibe für die bestimmte Region mit der durch den kurzen Zeiger (5) angezeigten gegenwärtigen Zeit auf dem feststehenden Zifferblatt für die bestimmte Region zusammenfallen; und

die Drehstellung der Staaten-/Ortsnamen-Anzeigedrehscheibe (7') so einstellbar ist, daß die Position der bestimmten Anzeigemarke mit Bezug auf das feststehende Zifferblatt (1) geändert werden kann, um den Zeitunterschied für eine andere Region auszudrücken, wenn eine Änderung von der bestimmten Region zu einer anderen Region vorgenommen wird,

wodurch die analoge Weltzeituhr das Aussehen von normalen Analoguhren mit sich von dem Zentrum radial wegerstreckenden langen und kurzen Zeigern (3, 5) beibehält und die gegenwärtige Zeit einer bestimmten Region anzeigen kann, während die Lokalzeiten in der Welt in einstellbarer Weise ausgedrückt werden.

2. Analoge Weltzeituhr nach Anspruch 1, wobei auf der Staaten-/Ortsnamen-Anzeigedrehscheibe (7') eine Weltkarte wiedergegeben ist, die mit der Antarktis im Zentrum über 360° abgewickelt ist.

3. Analoge Weltzeituhr nach Anspruch 1, bei welcher Unterschiede zwischen Tag und Nacht durch die Anzeigemarken der Lokalzeit-Anzeigescheibe (9)

zum Ausdrücken von Lokalzeiten in der Welt angezeigt werden.

4. Analoge Weltzeituhr nach Anspruch 1, bei der auf der Staaten-/Ortsnamen-Anzeigedrehscheibe (7') eine Weltkarte wiedergegeben ist, die mit der Antarktis als Zentrum über 360° abgewickelt ist, und Tag/Nacht-Unterschiede von den Anzeigemarken der Lokalzeit-Anzeigescheibe (9) zum Ausdrücken von Lokalzeiten in der Welt angezeigt werden.

Revendications

1. Horloge mondiale analogique comprenant:

   (a) un cadran fixe (1) ayant des graduations destinées à indiquer l'heure présente d'une zone spécifique, spécifiée sur une base de douze heures, combiné avec une grande aiguille (3), susceptible de tourner dans le sens des aiguilles d'une montre autour d'un centre, s'étendant radialement depuis ledit centre,
   (b) un premier disque tournant (7'), susceptible de tourner dans le sens des aiguilles d'une montre, à raison de 2 TPJ (tours par jour),
   (c) un deuxième disque tournant (9) destiné à indiquer les heures locales dans le monde, ledit disque étant susceptible de tourner dans le sens des aiguilles d'une montre à raison de 1 TPJ (tour par jour),
   (d) ledit cadran fixe (1), le premier disque tournant (7') et le deuxième disque tournant (9) étant superposés, en relation concentrique,

   caractérisée en ce que

   ledit cadran fixe (1) a ladite grande aiguille (3) et une petite aiguille (5), la petite aiguille pouvant également tourner dans le sens des aiguilles d'une montre autour du centre et s'étendant radialement depuis ledit centre, de manière que l'horloge analogique puisse indiquer ladite heure présente entièrement comme ceci est fait dans des horloges analogiques ordinaires; et
   ledit premier disque tournant (7') est un disque indiquant des noms de pays/villes, destiné à indiquer les noms de pays et de villes dans le monde, ledit disque ayant sur sa circonférence des marques d'indication destinées à exprimer les différences respectives, de temps, entre elles et,
   ledit disque (9) indiquant l'heure locale a autour de sa circonférence des marques d'indication, destinées à exprimer les heures locales des pays et des villes dans le monde, et
   lesdites petite et grande aiguilles (3, 5) sont réglées pour indiquer l'heure présente de la zone spécifiée sur le cadran fixe (1) et le disque tournant (7') indiquant le nom de pays/villes et le disque tournant (9) indiquant l'heure locale étant réglé de manière à ce qu'une marque d'indication, spécifique de la différence de temps, pour exprimer la zone spécifiée sur le disque tournant indiquant les noms des pays/villes et une marque d'indication d'heure locale spécifique pour indiquer l'heure locale sur le disque tournant indiquant l'heure locale de ladite zone sont placées en coïncidence avec l'heure présente sur le cadran fixe de la zone spécifiée indiquée par la petite aiguille (5); et
   le disque tournant (7') indiquant le nom des pays/villes étant susceptible d'être ajusté en rotation de manière que la position de la marque d'indication spécifiée puisse être modifiée par rapport audit cadran fixe (1) afin d'exprimer la différence de temps d'une autre zone lorsque ladite zone spécifique est changée, pour une autre zone,
   de manière que ladite horloge mondiale analogique conserve l'aspect des horloges analogiques ordinaires ayant les grande et petite aiguilles (3,5) s'étendant radialement depuis le centre et puisse indiquer l'heure présente d'une zone spécifique, tout en exprimant les heures locales dans le monde d'une manière pouvant permettre un réajustement.

2. L'horloge mondiale analogique selon la revendication 1 dans laquelle ledit disque tournant (7') indiquant le nom des pays/villes porte sur lui le dessin d'une carte du monde, développée sur 360°, centrée sur l'Antarctique.

3. L'horloge mondiale analogique selon la revendication 1 dans laquelle une distinction éventuelle entre le jour et la nuit est indiquée sur les marques d'indication afin d'exprimer les heures locales dans le monde dudit disque (9) indiquant l'heure locale.

4. L'horloge mondiale analogique selon la revendication 1 dans laquelle ledit disque tournant (7') indiquant le nom des pays/villes porte sur lui le dessin d'une carte du monde développée sur 360° et centrée sur l'Antarctique et une distinction éventuelle entre le jour et la nuit étant indiquée sur les marques d'indication, afin d'exprimer les heures locales dans le monde dudit disque (9) indiquant l'heure locale.

Fig. 1

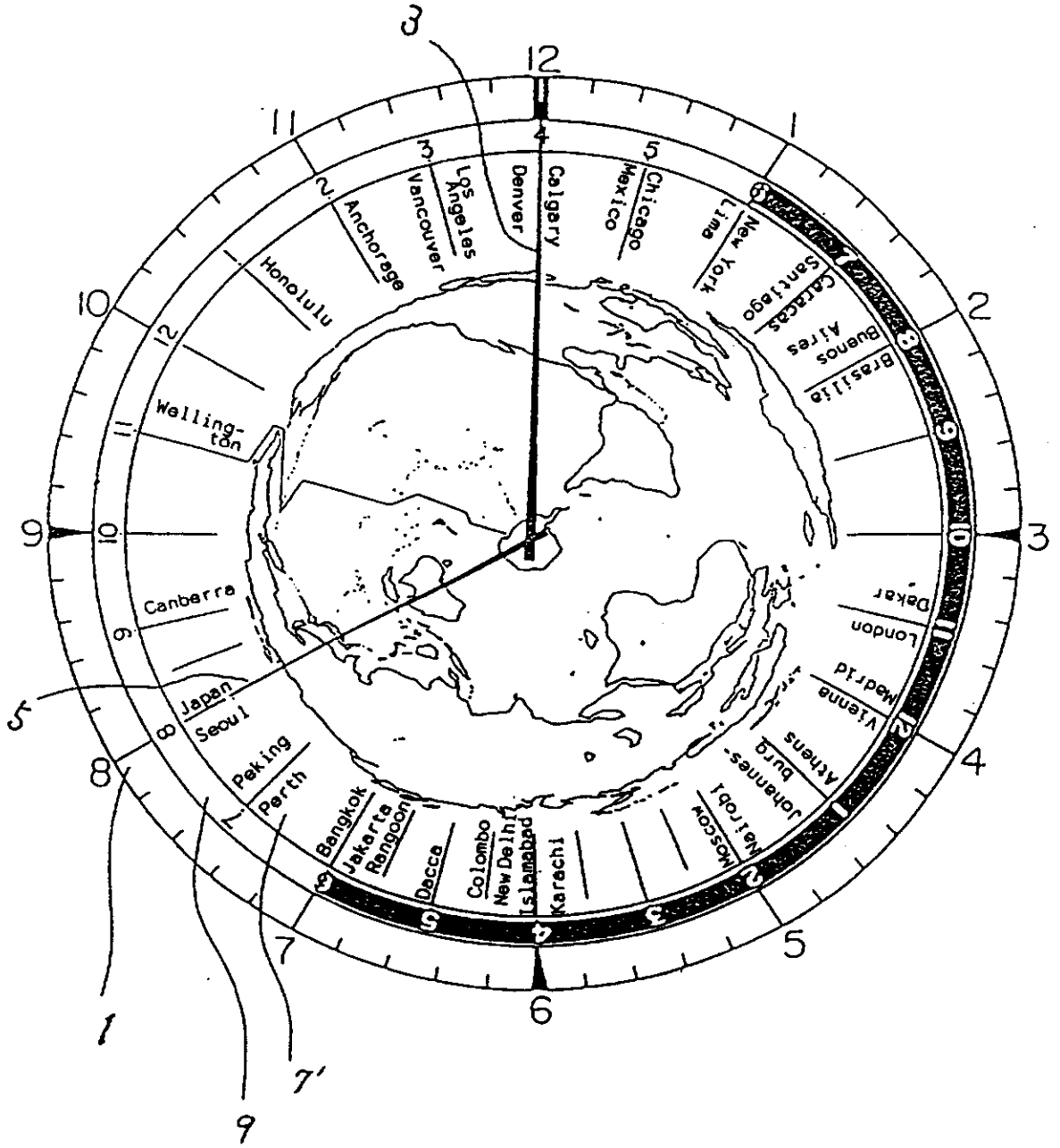
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Fig. 2

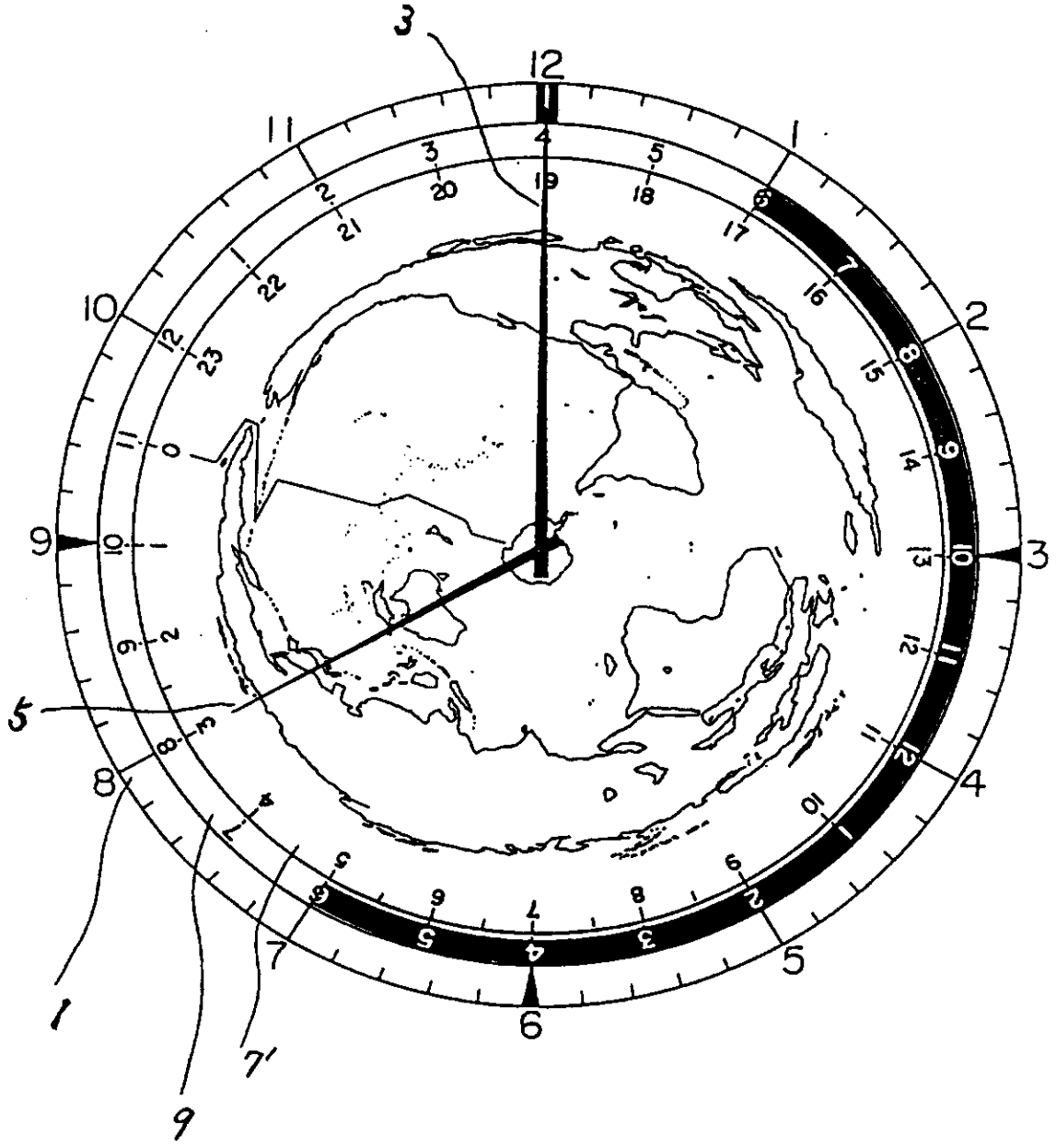
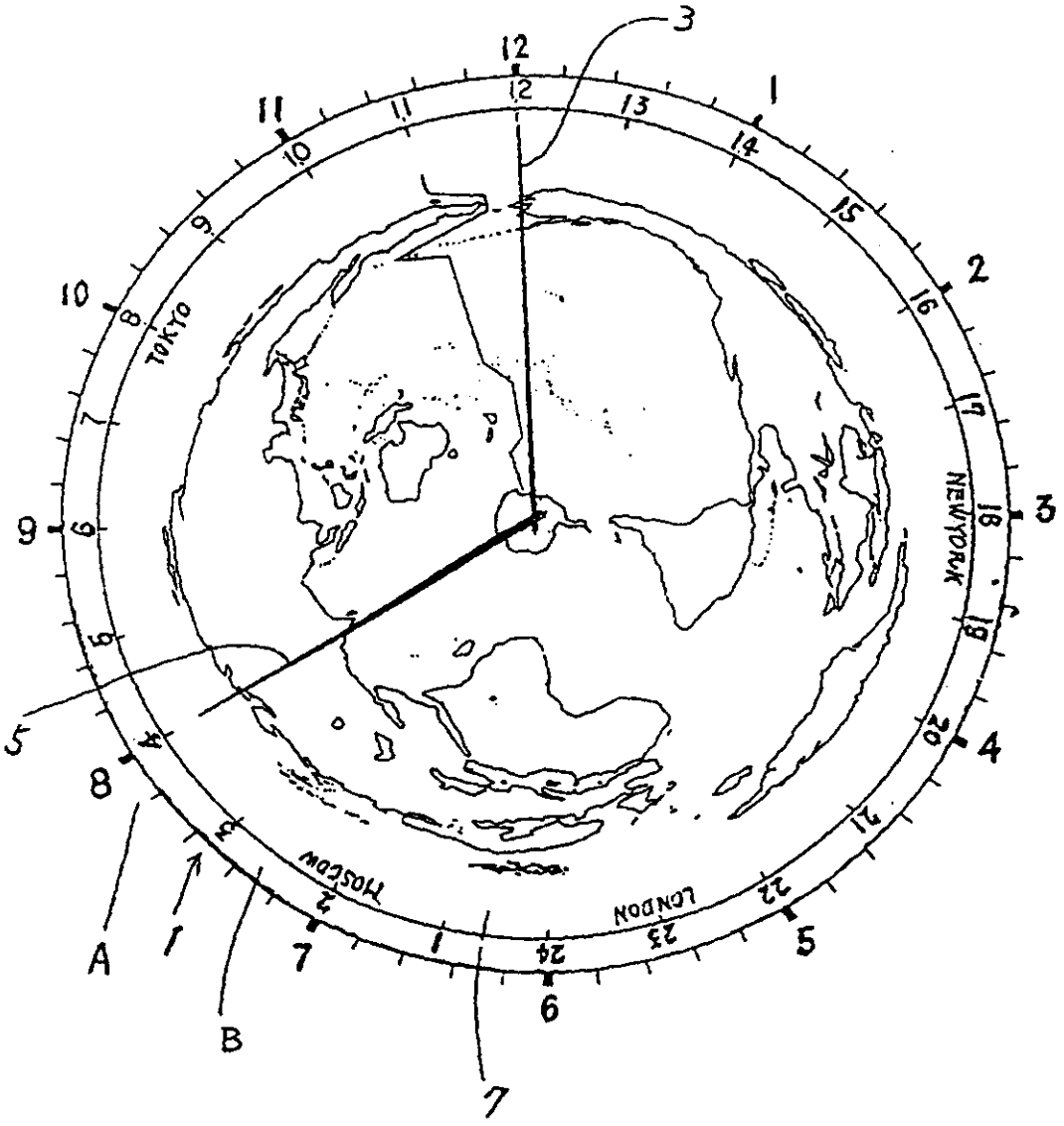


Fig. 3



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Applicant/Proprietor
YUKIO KOHNO, 16-7, Fujiwara 7-chome, Funabashi-shi, Chiba-ken, Japan
[ADP No. 59786749001]

Inventor
YUKIO KOHNO, 16-7, Fujiwara 7-chome, Funabashi-shi, Chiba-ken, Japan
[ADP No. 59786749001]

Classified to
G04B

Address for Service
GEE AND CO, Chancery House, Chancery Lane, LONDON, WC2A 1QU, United Kingdom
[ADP No. 00000737001]

EPO Representative
GERHARD SCHWAN DIPL.-ING., Elfenstrasse 32, W-8000 München 83, Federal Republic of Germany
[ADP No. 50700608001]

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[ADP No. 00000737001]
registered as address for service
Entry Type 8.11 Staff ID. JM1 Auth ID. F51

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GERHARD SCHWAN DIPL.-ING., Elfenstrasse 32, W-8000 München 83, Federal Republic of Germany
[ADP No. 50700608001]
to
GERHARD SCHWAN DIPL.-ING., Elfenstrasse 32, D-81739 München, Federal Republic of Germany
[ADP No. 50700608001]
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Yukio Kohno, 16-7, Fujiwara 7-chome, Funabashi-shi, Chiba-ken, Japan

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