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(56) Documents Cited:
WO 2001/033529 A1 **US 6278372 B**
US 5952924 A **US 5486814 A**

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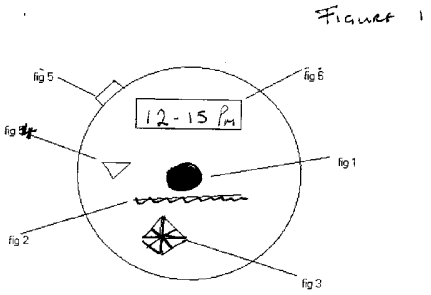
UK CL (Edition W) **G4N**
INT CL[7] **G08B**
Other: **Online: EPODOC JAPIO WPI**

(54) Abstract Title: **Hand-washing reminder alarm with washing detector carried on users hand or wrist**

(57) A hand-washing reminder alarm comprises a device worn on the hand or wrist of a user, such a nurse, which has a water and / or soap detector which is able to reset a timer. The timer will expire after a preset period if the user fails to wash their hands and this will trigger a reminder warning such as a LED light or a piezoelectric sounder or a vibrating means. The reminder warning will continue intermittently for a second period, during which the user can reset the timer by washing their hands. If the second period expires without hand washing being detected, the device will trigger a second warning and the device will then require external intervention to be reset. The device may comprise a wrist band or watch having a LED light 3, sensor 1, vibrator 2, piezoelectric sounder 4 and volume control 5.



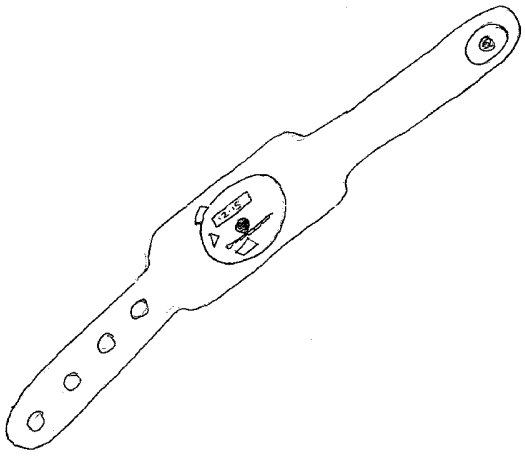


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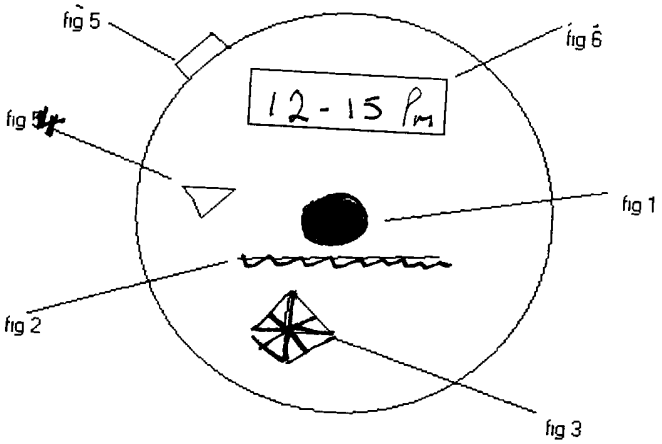
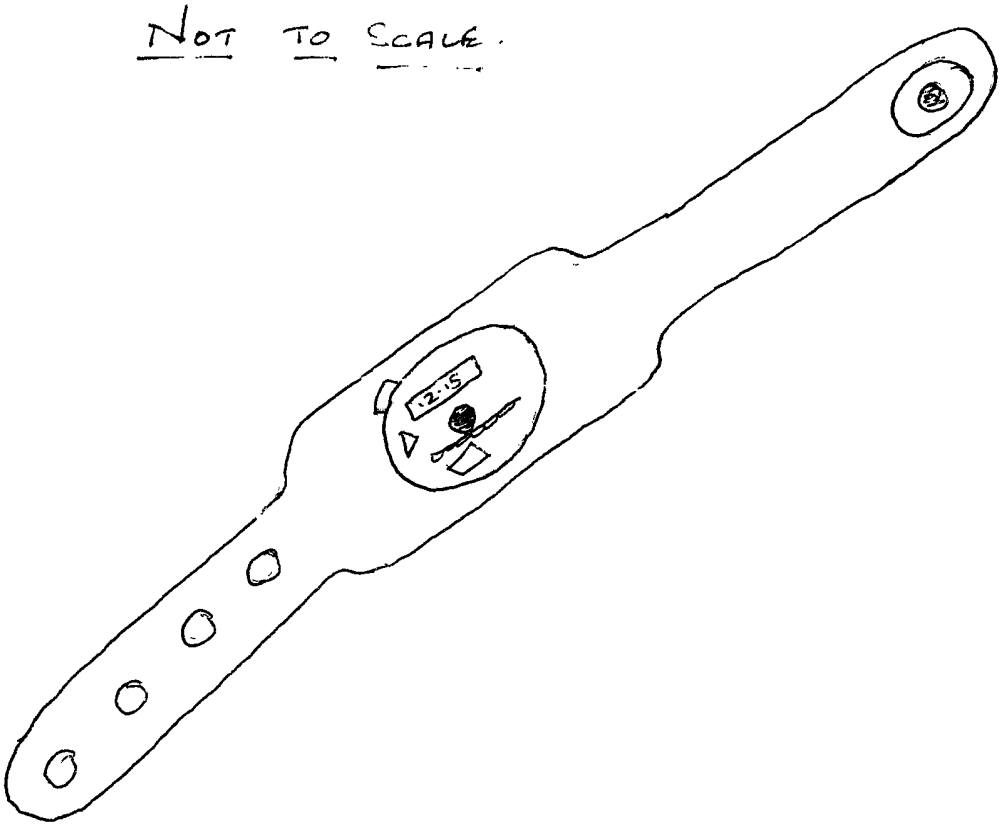
FIGURE 1/1. DRAWINGS



NOT TO SCALE.



This invention relates to a devise that defects water/soaps when washing ones hands.

The **safe hands** H2o/soap detector, When worn by **doctors and nurses** or any one in the health care industries, are wearing one of our (safe hands) H2o detectors it will detect that one hand's have been washed which will then deactivate 3 systems that have been in corporated into our device.

1. The pizo buzzer audio alert
2. The built in vibration module.
3 The red flashing led (light emitting diode) the device has an in built Clock from 0 minutes to 60 minutes which would normally be set at 15 minutes intervals to warn the wearer to go and wash there hands in order to deactivate the system. The device can be set to any time interval using an infra red pen code/transmitter. Which would normally be kept by the sister or person in charge?

The device "**safe hands**" H2o /chemical detector has an inbuilt sensor so that when it defects water (H2o) / soaps etc... Directly over the sensor it will deactivate the system (automatically) to then go a further 15 minutes before alerting the wearer to go and wash there hands again.

When the system H2o has been activated, it will be in alert mode this is because they **have not washed there hands**, And will then in alert mode for 60 seconds, if it has not detected water Etc, It will then activate at 5 minutes intervals for a period of 60 minutes if not deactivate. It will then close down and red led will be in constant mode. And can only be reactivated using the infra red pen code reader/transmitter. When the LED as in figure 3 is constantly lit it would let the patient know to remind the Doctor/Nurse to wash there hands before commencing treatment

In figure 1, the h2o or safe hands/ soap detector this is the main integral part of our device, which acts like an on/ off switch, to activate or to Deactivate the alarm systems it either detects water ECT... Or does not detect water Etc.

In Figure 3, the red light emitting diode (low in consumption power of the 1-5 v watch battery) when in none activated mode will not be lit. (Passive) ounce the 15 or what ever the pen code /reader was set at minutes have expired it will the flash. This will then draw current off the battery and set

In Figure 4, the pizo alarm and **figure 2**, the vibration modal will alert for 5 seconds only to save battery power, **(go and wash your hands).**

In figure 6, this is the clock /pen code reader which controls two main events, the timing of when you want staff ect... to wash there hands and programming / renabiling of the safe hand h2o /soap detector.

Figure 5, Is the volume adjustment from 0 d/b to 15 decibels IE on /off? But would not affect figure 2 or figure 3. This is for staff when they are on night duty and do not want to disturb the patients who are asleep.

Claims

1. This device the safe hands H2o detector can be made for any finger and made out of rubber or plastic and to fit any hand
2. As in claim 1. the device H2o detector can also be incorporated into a wrist band or a watch
3. The H2o (safe hands) detector would be a major contribution to the reduction of **bacteria/virus's** spread from patient to patient and more importantly the **MRSA virus which kills.**
4. As in claim 3 if the patent see's the wearer has the **led as in figure 3** on the drawings permanently lit, they would then request the doctor/ nurse to wash there hands thus **avoiding contamination and the spread of germs.**

Application No: GB0419818.0
Claims searched: All

Examiner: Gareth Lewis
Date of search: 22 November 2004

Patents Act 1977: Search Report under Section 17

Documents considered to be relevant:

Category	Relevant to claims	Identity of document and passage or figure of particular relevance
A	-	WO01/33529 A1 (WILDMAN) See whole document, especially figures and abstract.
A	-	US5952924 A (EVANS) See whole document, especially the abstract, figures, column 5 lines 44 to 52
A	-	US6278372 B (ECOLAB) See whole document, especially figures and abstract
A	-	US5486814 A (QUINONES) See abstract and figures

Categories:

X	Document indicating lack of novelty or inventive step	A	Document indicating technological background and/or state of the art.
Y	Document indicating lack of inventive step if combined with one or more other documents of same category	P	Document published on or after the declared priority date but before the filing date of this invention.
&	Member of the same patent family	E	Patent document published on or after, but with priority date earlier than, the filing date of this application.

Field of Search:

Search of GB, EP, WO & US patent documents classified in the following areas of the UKC^{W} :

G4N

Worldwide search of patent documents classified in the following areas of the IPC^{07}

G08B

The following online and other databases have been used in the preparation of this search report

Online: EPODOC JAPIO WPI