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**Yoshida et al.**

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(54) **WRIST-WORN COMMUNICATIONS APPARATUS**

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- (\* ) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 100 days.

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- G04B 47/00** (2006.01)
- G04C 11/02** (2006.01)
- H04B 1/38** (2006.01)
- (52) **U.S. Cl.** ..... 368/10; 368/13; 368/47; 368/282; 455/90.3; 455/344
- (58) **Field of Classification Search** ..... 368/4, 368/10, 13, 47, 88, 281, 292; 455/90.3, 344
- See application file for complete search history.

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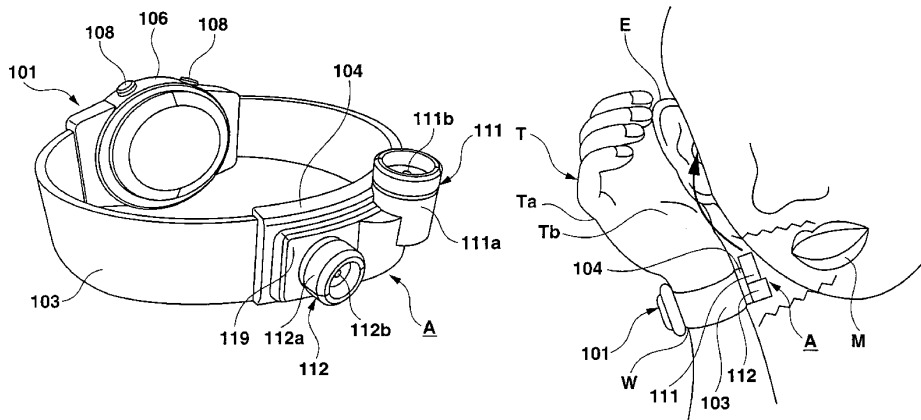
\* cited by examiner

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(57) **ABSTRACT**

A watch of the communications apparatus is worn on a user's wrist by bands. A support member pivoted on the band is then turned so as to extend in the transverse direction of the bands. A speaker unit is provided on the support member so as to face in a transverse direction of the band while a microphone unit is disposed on the support member so as to face in a direction perpendicular to a surface of the band. When a user communicates with the other party, the speaker unit provided on the support member is directed toward the user's ear. This causes the microphone unit provided on the support member to be directed easily toward the user's mouth. Alternatively a hinged lid is provided the lid carrying a key-in unit or a display and a speaker unit.

**8 Claims, 20 Drawing Sheets**



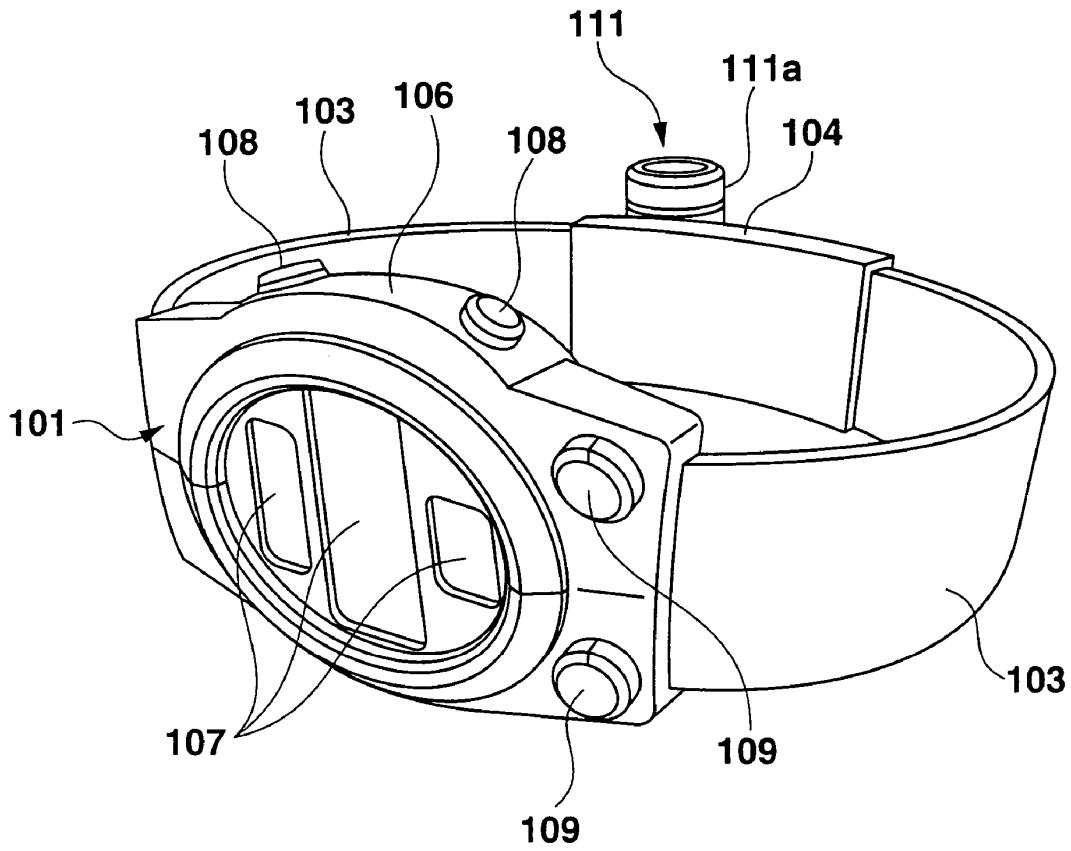


FIG.1

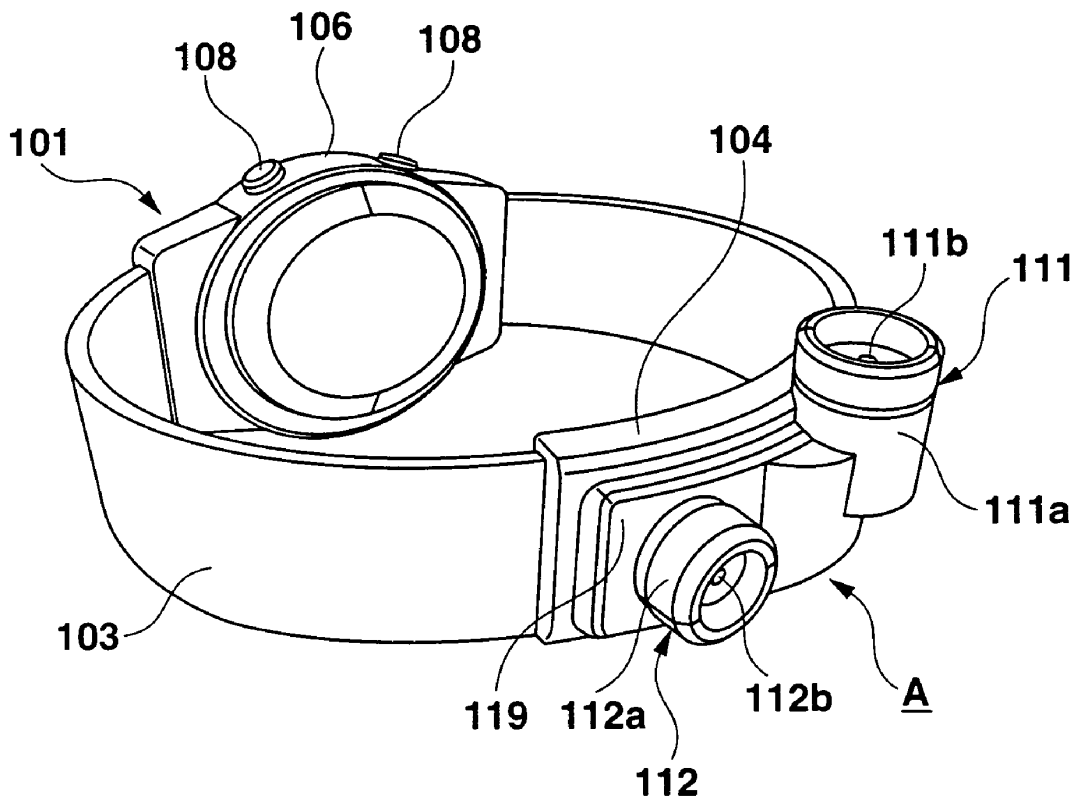


FIG. 2

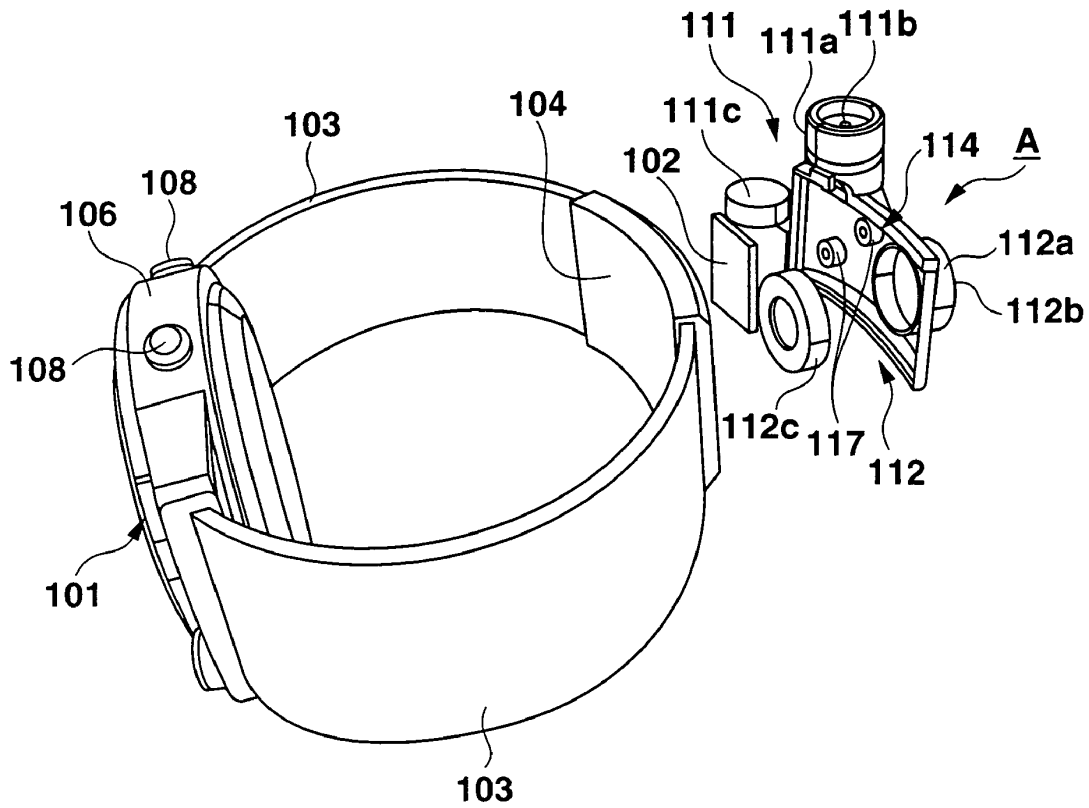
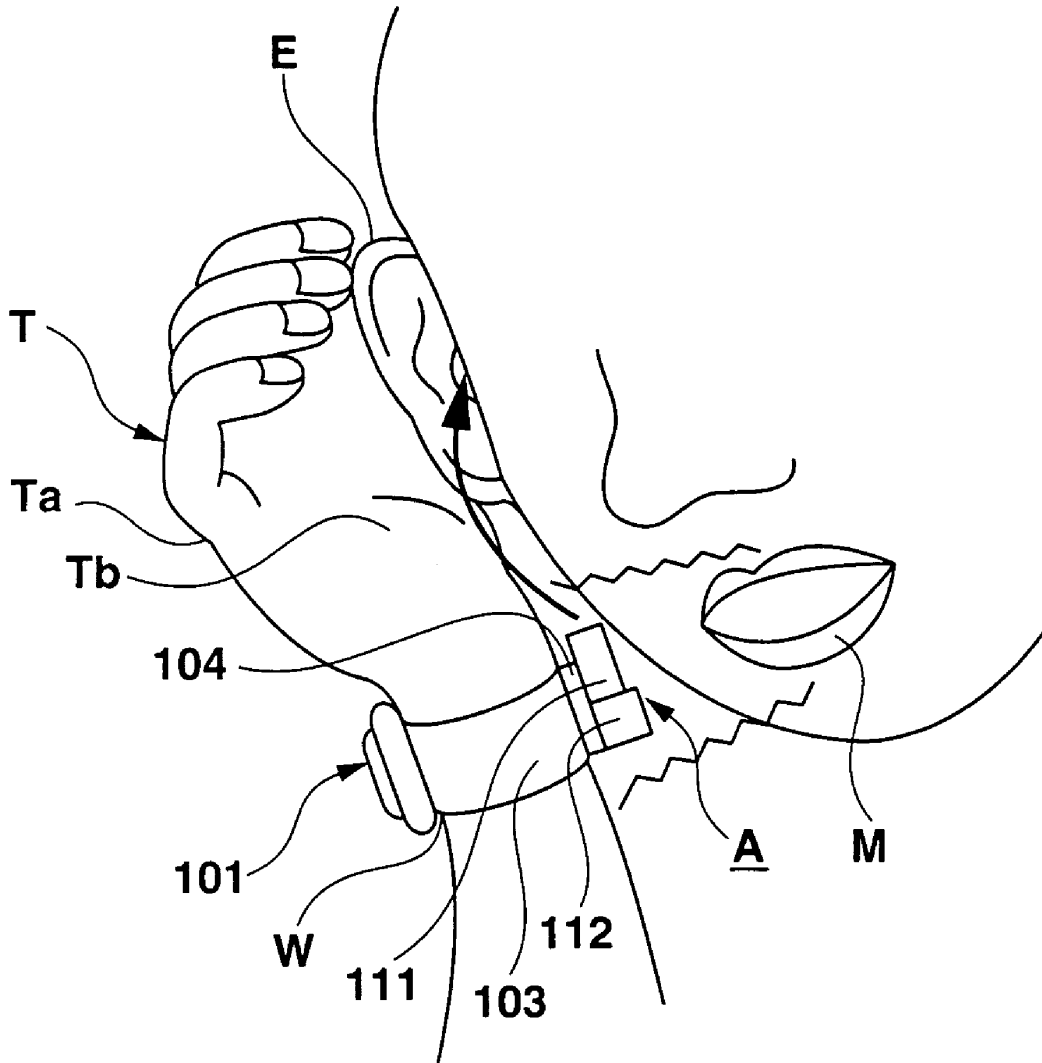


FIG.3



**FIG. 4**

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