

**NALSAR PROXIMATE EDUCATION
NALSAR UNIVERSITY OF LAW, HYDERABAD
P.G.DIPLOMA IN PATENTS LAW
2004-05**

**Paper IV - Practical
(Abuse of Patents)**

Time: 2 ½ hours.

Full marks: 60.

You are required to attempt all Questions.

- 1) What do you understand by ANDA? Mention the requirements for an ANDA application. Discuss the different certification of ANDA
(2+3+4)
- 2) Write short notes on –
 - a) Bolar Provisions
 - b) *Diamond vs Chakraborty*
 - c) Patent Equivalents
 - d) Prosecution History Estoppels.(3X4)
- 3) What do you understand by *Doctrine of Equivalence* in patents? How can it be determined for a specific patent?
(2+4)
- 4) Is it possible to get a worldwide patent?
(3)
- 5) William, Andrew and Ron have approached you with the following figures and write up of their invention. Study the data that is provided and answer the questions that follow:

William, Andrew and Ron believes to posses an invention - a timepiece, such as a watch, has a plurality of concentric rotating bands, viewable from both above and from the side so that a viewer may read the time without changing the orientation of the timepiece. The timepiece has an attachment mechanism that permits the removable attachment of objects, such as sculptures or other ornamental pieces to the surface of the timepiece.

The invention is directed to timepieces and particularly to timepiecees having rotating conical bands which indicate the time and having removable objects, such as a sculpture or other artwork, on the timepiece.

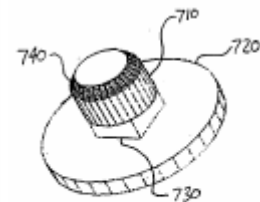
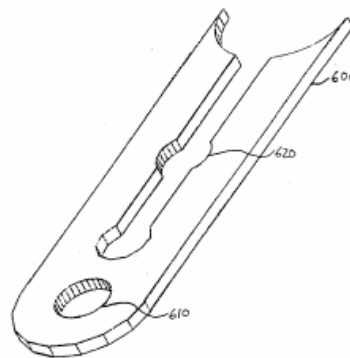
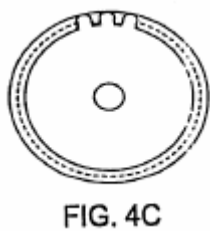
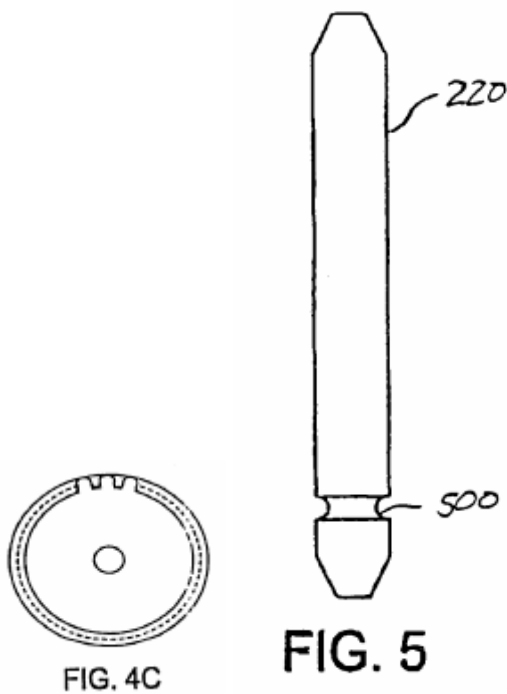
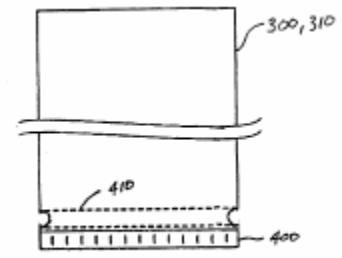
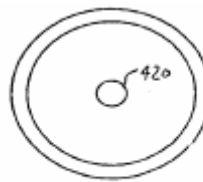
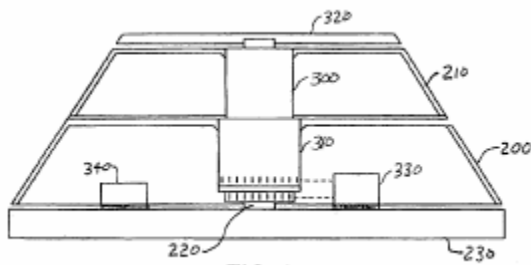
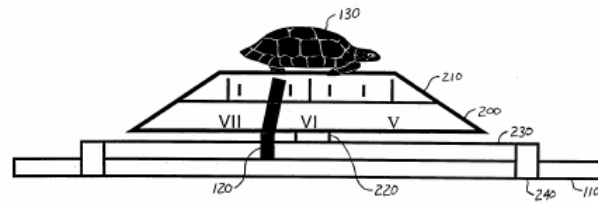
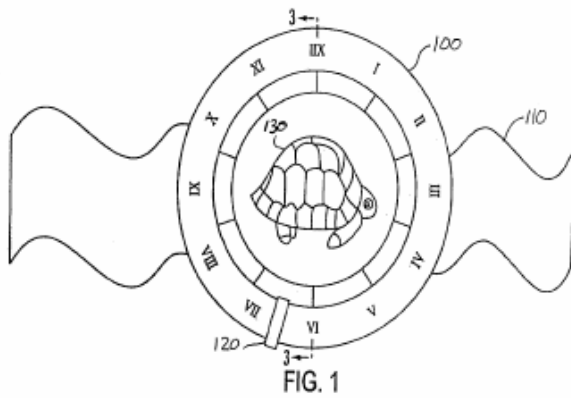


FIG. 1 shows a top view of an exemplary timepiece in accordance with the invention.

FIG. 2 is a side view of an exemplary timepiece in accordance with the invention.

FIG. 3 is a section view of a timepiece along section lines 3—3 of FIG. 1.

FIGS. 4A, 4B and 4C show top, side and bottom views of drive cylinders used in accordance with one aspect of the invention.

FIG. 5 is an illustration of a shaft to which the cylinders of FIG. 4 might be mounted for operation.

FIG. 6 is an exemplary implementation of a wishbone spring, typically secured to an object that is to be mounted to the timepiece.

FIG. 7 is a perspective view of an exemplary stud which can be mounted to a timepiece and which mates with the spring of FIG. 6 to hold an object in place.

FIG. 1 shows a view of an exemplary timepiece, namely a watch, in accordance with the invention. Watch **100** has a watchband **110** and a fixed time indicator **120**. A section **3—3** along the centerline of the watch is shown more in detail in FIG. 3. Watch **100** has an object **130** removably attached thereto as described more hereinafter.

FIG. 2 is a side view of exemplary watch **100**. An object, in this example an ornamental sculpture **130**, is removably mounted on the top of the watch. In the illustrated embodiment, the watch has two concentric conical time display bands or rings which rotate about the center of the watch. The bottom one **200**, in this example, shows the hour as a location under time indicator **120**. The top one **210** shows the minutes. Other bands or rings could be implemented as well. A watch base **230** serves as a mechanical base for the timepiece and permits the connection **240** of a watchband **110**.

FIG. 3 is a section view of watch **100** along section lines **3—3** in FIG. 1. A watch base **230** and platform **320** are mounted together by connection to shaft **220**. In this example, the shaft can be press fit or snap fit into the base and into the platform although other techniques for attachment could be used as well. The platform **320** serves as a mounting base for an object such as an ornament or sculpture. The conical time display band or rings **200** and **210** mount to cylinders **310** and **300** respectively, shown in more detail in FIG. 4. One exemplary technique for mounting includes soldering or welding the time display rings to the cylinders. Other techniques may be used as well. Cylinders **300** and **310** are mounted to the shaft **220** concentrically, so as to permit independent rotation, and cylinder **300** fits within cylinder **310**. Motor mechanism **330** is coupled to a gear arrangement at the bottom of each cylinder **300** and **310** by one or more gear trains, indicated as dashed lines. A battery **340** may be conveniently mounted to the watch base. The gear train could, of course, be driven by a mechanical drive mechanism of the type used in timepieces for hundreds of years, rather than by an electrical motor.

FIGS. 4A, 4B and 4C show exemplary cylinders **300** and **310**. A gear or gear teeth are mounted to or formed in the bottom of the cylinder. These engage the gear arrangement driven by the motor. In the implementation of cylinder **300**, a notch **410** is provided into which a split C ring may be fitted to keep cylinder **310** from sliding down and interfering with the engagement of the cylinder **300** with the gear arrangement of cylinder **300** driven by the motor.

FIG. 5 is an illustration of shaft **220**. It too has a notch (**500**) provided into which a split C ring may be fitted to keep cylinder **300** from sliding down and engaging the watch base which might interfere with the rotation of the cylinder.

The preferred technique for mounting an object to platform **320** is shown in FIGS. 6 and 7. There

are two basic parts to this system, a wishbone shaped spring (FIG. 6) and a stud (FIG. 7). In general the spring is secured to the piece that it is to be attached to the watch and the stud is secured to platform **320**, preferably at the top and center of the watch.

The wishbone spring **600** is preferably made of spring steel. In an exemplary embodiment, the dimensions of this spring would be approximately 20 mm long, 5 mm wide, and 0.5 mm thick. There is a drilled hole **610** at one end to facilitate a screw for securing to the object to be removably attached. A drilled hole **620** in the middle of the spring, slightly smaller than the pilot diameter of the stud, **710**, facilitates easy attachment of the spring mounted object to the stud.

The stud is preferably made of hardened and polished steel. This piece has three distinct features, namely, the base **720** (preferably about 5 mm in diameter), the square **730**, and the pilot diameter (each about 2 mm in diameter). The total height from bottom of base to top of the pilot diameter of this part is about 5 mm. The pilot diameter has a tapered end **740** which tapers down from the diameter of pilot diameter to a minor diameter smaller than the size of hole **620** in the wishbone spring.

In this embodiment, it is important that the diameter of the hole **620**, in the center of the wishbone spring, be smaller than the diameter of the pilot diameter of the stud. About 25% smaller would be preferable. In this embodiment, it is also important that the apex of the square be the same size as the pilot diameter to facilitate easy removal.

For assembly, a object, such as sculpture **130** is attached to the wishbone spring **600**, using, for example, a screw that passes through hole **610** in the spring and into the body of the object.

The wishbone spring is pressed over the tapered (conical) end of the stud and forced open until it opens enough to pass over the pilot diameter until it snaps into place on the square section of the stud. The square section of the stud allows several important advantages. First, the object can be positioned in any 90 degree increment. Second, the object will be easily removed by a simple turn of 45 degrees and lifting away from the watch.

- a) *Do William, Andrew and Ron have an invention?*
- b) *Discuss the novelty, non-obviousness and utility of proposed invention's claims.*
- c) *Timepieces are well known in the art as are timepieces which can be worn by an individual. Wrist watches, pocket watches, broaches or pendant watches are also known. Will William, Andrew and Ron infringe several such unexpired patents?*
- d) *What will be your advice to your client? Why?*
- e) *Draft a set of claims for the proposed patent application.*

(2+8+6+4+10)
