Claims

1. An accessory attachment apparatus, comprising:

a ring fixedly attached to or integrally formed upon an accessory and having central axis, the ring having defined thereon a first mounting surface and a tapered surface sloping toward the central axis and away from the mounting surface;

an annular member fixedly attached to a second mounting surface, formed on a device to which the accessory is to be attached, the annular member having an inner surface dimensioned to concentrically face at least a portion of the tapered surface when the accessory is attached, the annular member having a plurality of spaced apart radial through holes extending through the annular member from an outer surface to the inner surface;

a corresponding plurality of spring-biased pins disposed in the plurality of radial through holes, each spring-biased pin comprising a head, a conical tip for engaging the tapered surface, and a spring biasing the pin toward a direction opposite a direction in which the pin engages with the tapered surface; and

a rotation plate disposed about the annular member, the rotation plate including an inner surface configured to oppose the outer surface of the annular member the inner surface of the rotation plate having a plurality of ramped surfaces circumferentially formed therein and configured to receive the heads of the plurality of spring-biased pins; and

wherein the rotation plate is rotatable from a first position wherein the ramped surfaces apply no radial inward force to the spring-biased pins, to an attached position wherein each ramped surface longitudinally displaces one of the spring-biased pins inward through its corresponding through hole such that the conical tip of the spring-biased pin engages the tapered surface of the ring , thereby immobilizing the accessory with respect to the device.

2. The accessory attachment apparatus of claim 1, wherein the ring defines an inlet through which fluids flowing from the device and received by the accessory pass.

3. The accessory attachment apparatus of claim 1, wherein the device comprises a head unit of a temperature controlled air forcing system.

4. The accessory attachment apparatus of claim 1, further comprising one or more stops formed at an end of the ramped surface on the inner surface of the rotation plate so as to limit rotation of the rotating plate by preventing one or more spring-biased pins from sliding circumferentially past the stop .

5. The accessory attachment apparatus of claim 1, wherein the accessory comprises one of a pipe or a flexible hose.

6. The accessory attachment apparatus of claim 1, wherein the accessory comprises an enclosure that surrounds a device under test within a temperature-controlled environment.

7 The accessory attachment apparatus of claim 1, wherein the plurality of spring-biased pins and radial through holes are equally space around the inner surface of the annular member.

8. The accessory attachment apparatus of claim 1, wherein the plurality of ramped surfaces has a detent formed therein for receiving and preventing motion of a spring biased pin in the attached position.