CLAIMS

1. Bracelet or strap for a watch case (10) comprising a first arm (2), inside which is housed a first printed circuit board portion (4), and a second arm (6), the first printed circuit board portion (4) carrying at least one electronic component arranged to perform a corresponding electronic function, and an electrical energy source (40) and a microcontroller (34) for powering and controlling the electronic component arranged to perform a corresponding electronic function, at least one pushbutton (64) for inputting a control signal into the microcontroller (34) being arranged inside the bracelet (1) above a rigid surface offering a support surface which, in response to a pressure exerted on the actuating element (64), exerts a reaction force sufficient to ensure that the pressure exerted on the actuating element (64) is not at least partially compensated by corresponding deformation of the bracelet (1), the first arm (2) being connected to the second arm (6) via a median part (8) arranged to be situated underneath the watch case (10), a second printed circuit board portion (12) housed inside the second arm (6) and carrying at least one other electronic component being connected to the first printed circuit board portion (4) housed inside the first arm (2) via the median part (8), which includes a third printed circuit board portion (14) connected to the first and second printed circuit board portions (4, 12) by electrical connecting means,

characterized in that the first arm (2) and the second arm (6) are formed by the first printed circuit board portion (4) and the second printed circuit board portion (12) covered with a first overmoulding layer (76),
an insert (20) that covers the median part (8) and that acts as a seat for the watch case (10) is also covered by the first overmoulding layer (76),
the insert (20) comprises two guide elements (50) arranged to be placed between two respective pairs of horns (48) carried by the watch case (10), the guide elements (50) each being pierced with a hole (52) for the passage of a pin (54) for attaching the bracelet (1) to the watch case (10), a housing

(56) in which is arranged a pressure sensor (58) being provided in one of the guide elements (50) and opening into the hole (52) for the passage of the corresponding pin (54), said hole (52) having, on one part of the periphery thereof, a local increase in diameter (60) to allow the pressure sensor (58) to be placed in contact with the surrounding environment, the pressure sensor (58) being mounted on the third printed circuit board portion (14).

2. Bracelet or strap according to claim 1, characterized in that the rigid surface is formed by a folding buckle clasp.

3. Bracelet according to any of claims 1 or 2, characterized in that the first, second and third printed circuit board portions (4, 12, 14) are made in one piece.

4. Bracelet according to claim 3, characterized in that the median part (8) includes at least one arch portion (94).

5. Bracelet according to any one of the preceding claims, characterized in that the bracelet (1) which is formed of the first and second printed circuit board portions (4, 14) overmoulded by means of the of the first overmoulding layer (76) and of the median part (8) covered by the insert (20), is slipped inside a sleeve (78) formed of a first strand (80) and of a second strand (82) connected to each other by a connecting part (84), the first and second strands (80, 82) being hollow and each provided with an opening (86) so that the first and second arms (2, 6) can slide therein.

6. Bracelet according to claim 5, characterized in that the sleeve (78) is formed of an upper band (88) and a lower band (90) joined to each other along the peripheral edges (92) thereof.

7. Bracelet according to any of the preceding claims, characterized in that the bracelet (1) is overmoulded with a second layer of plastic or elastomeric material.

8. Bracelet according to claim 1, characterized in that the rigid surface is formed by the electrical energy source (40).

9. Bracelet according to claim 8, characterized in that the electrical energy source (40) is a button cell battery.

10. Bracelet according to claim 9, characterized in that the button cell battery is arranged in the area of connection of the bracelet (1) to the watch case (10).

11. Bracelet according to any of claims 1 to 10, characterized in that the push-button (64) consists of a dome-shaped flexible metal sheet (66), the dome (66) having four equidistant arms (68) bearing on a first contact (70) provided on the first printed circuit board portion (4), and a peak (72), which, when the user presses the push-button (64), deforms and bears on a second contact (74), also provided on the first printed circuit board portion (4), which allows a signal to be sent to the microcontroller (34).