Base 201 comprises a recess where a TIR lens 203 is positioned. Underneath TIR lens 203 a (preferably high power or high intensity) Royal blue LED 202 (for example 3W) is placed. Combining LED 202 with TIR lens 203 provides a focused beam of light directed straight up projecting a blue light on the movable part 401. The light, which is in the given example directed upwards, is schematically indicated by three arrows pointing upwards through area 501 towards the movable part 401. Instead of one LED 202, the luminaire 100 may comprise multiple LEDs to either increase the light intensity, provide more light Effects, provide more spreading of light, or to provide more variations in colors. LEDs may for example be incorporated in the stationary part as well. These LED may be directed towards the movable part for example to provide an indirect or ambient light. Preferably underneath the LED 202 a heat sink 204 is provided. The LED 202, the electromagnetic coils 102 and the Hall Effect sensors 103 are connected to a circuit board which is preferably positioned in the base 201. The control unit 205 is arranged for controlling the LED 202, the electromagnetic coils 102 and the Hall Effect sensors 103.

It is desirable for the luminaire to have a usable light source with a high CRI of 92 or better, with a color temperature ranging from 2500 to 4000 K. This can be achieved using currently available phosphors in conjunction with blue LEDs. An alternative preferred embodiment uses a combination of a blue LED chip with a red LED chip (or any other color), configured in a two-dimensional array at the base of stationary part of the luminaire. In order to achieve high uniformity of both red and blue light on the phosphor, homogenizing lenslets may be added to the inner flat face of a plano-convex lens. Alternatively, a holographic or other shaping diffuser can be used after the lens. By individually tuning the currents supplied to the red and blue LEDs, a wide range of color temperatures can be achieved, all with very high CRI.

The arm 301 may be used to guide the cables from the Hall Effect sensors 103 and the electromagnetic coils 102 to the base 201. The arm may be constructed in such a way that the center of the electromagnetic coils 102 in the stationary part is aligned exactly above the LED in the base 201.