A disadvantage of the current art solutions is that they do not provide a solution for levitation or suspension of a light source without complicated additional power means. Instead, only objects with either their own (battery) power source are levitated or suspended, or complicated wireless energy transmission systems are proposed, requiring wireless energy receiving devices, such as electromagnetic couplers.

DISCLOSURE OF INVENTION

It is an object of the present invention to provide a luminaire with a suspended light source which does not require complex technology such as batteries, electronic circuitry or electromagnetic coils. It is a further object of the invention to enable easy and intuitive operation of the luminaire. It is yet a further object of the invention to provide means to vary the color and intensity of the suspended light source.

The object is realized by.

The invention comprises the following clauses and embodiments:

1. A luminaire comprising:
- a stationary part comprising one or more electromagnetic coils;
- a stationary light source comprised in the stationary part
- a movable part comprising a magnet and arranged for being freely movable relative to the stationary part creating a gap between the stationary part and the movable part;
- the stationary light source is arranged for emitting light towards the movable part;
- one or more Hall Effect sensors comprised in the stationary part arranged for measuring the size of the gap;
- a control unit arranged for regulating the size of the gap by controlling the current of one or more electromagnet coils whereby an increase of the current to one or more electromagnetic coils generates an increased force on the magnet;
- the magnet, the one or more electromagnetic coils and control unit, arranged for controlling the energizing current of the one or more electromagnetic coils in such a