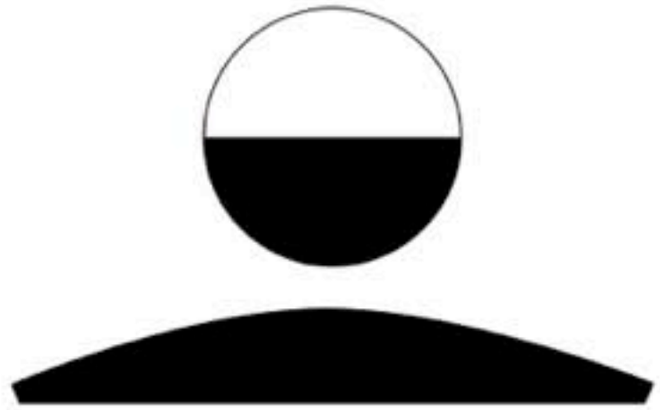
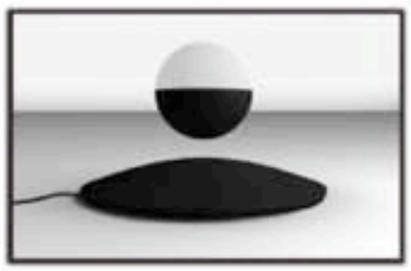
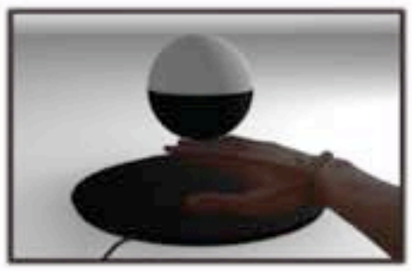
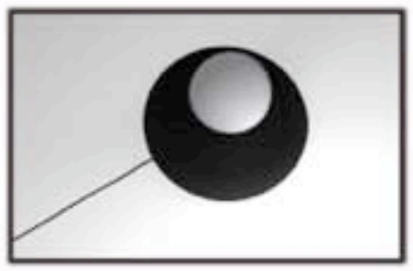


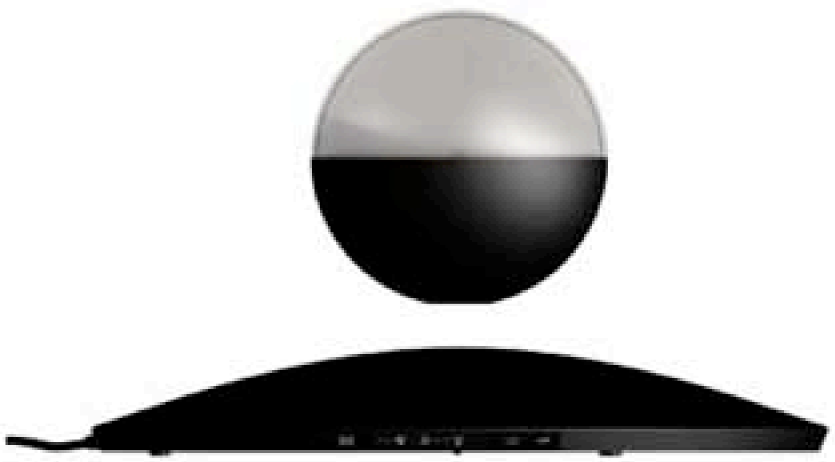
simply
FLOAT

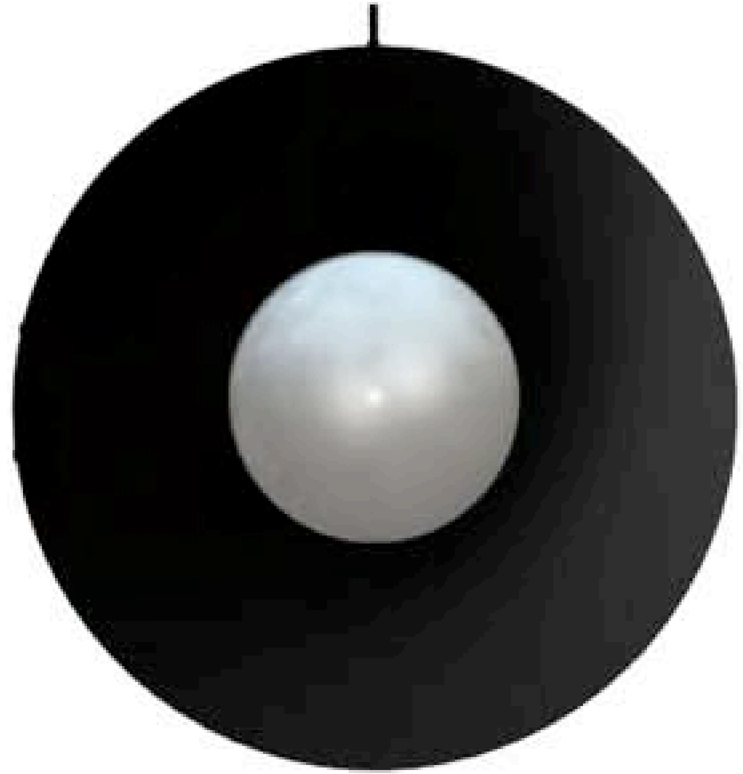




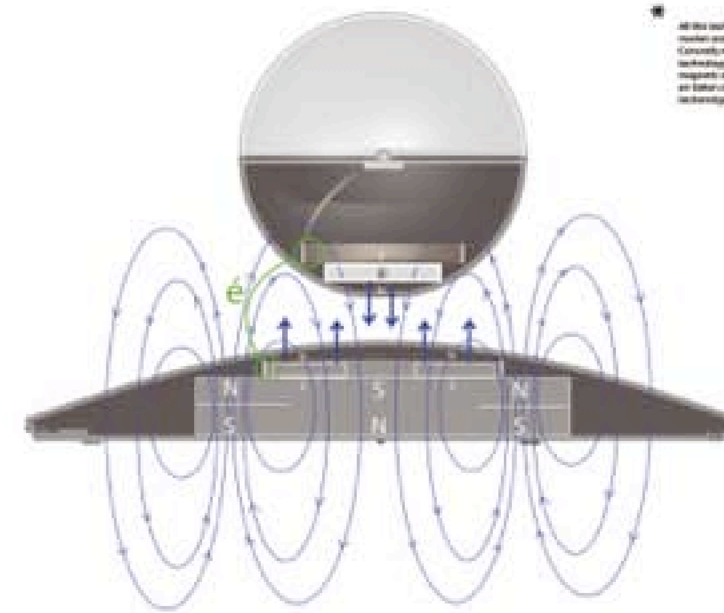


REAL SCALE VIEWS

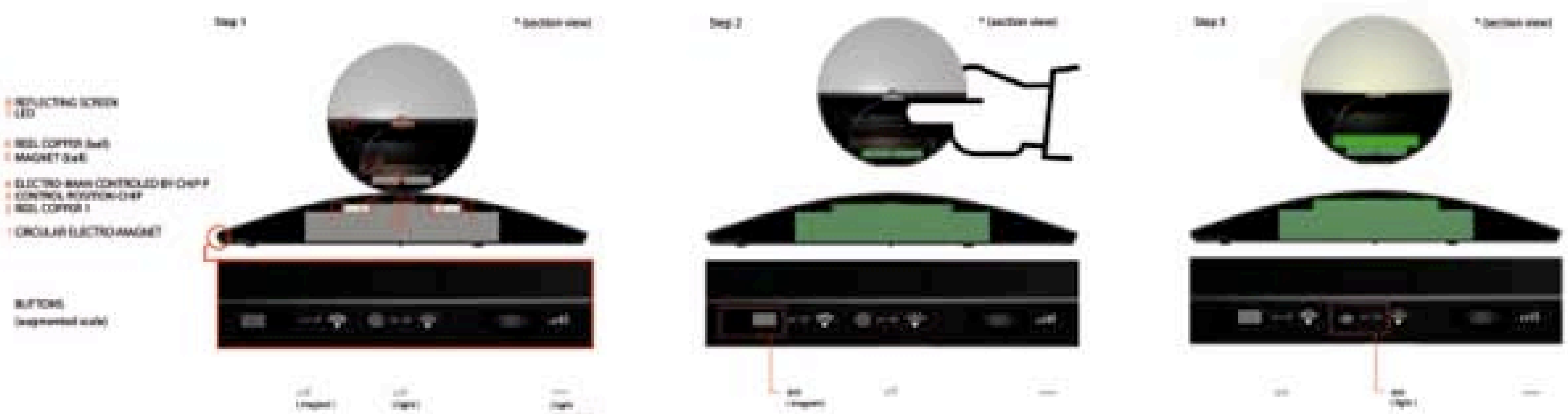




GRAPHIC TECHNOLOGIC



USE



TECHNOLOGY EXPLANATION

TECHNOLOGY OF MAGNET INDUCTION

To power the LED on the top of the ball it use the phenomenon of electromagnetic induction. This allows us to transmit energy wirelessly from the base until the ball. Discovered by Michel Faraday in 1831, electromagnetic induction is the generation of electric current in a closed circuit when a change in the magnetic flux content within that circuit. This is the principle on which they are based devices as common as the old electrical transformers, alternators cards or radio frequency identification, among others. The assembly consists of two coils, a first coil at the base, to generate variations in magnetic field flow and fed with an alternating current at high frequency, and a second coil at the bottom of the ball to generate a high frequency alternating current flow through the changes produced by the coil at the base. In series with the second coil is connected the LED, so the lighting was achieved with an extremely simple assembly.

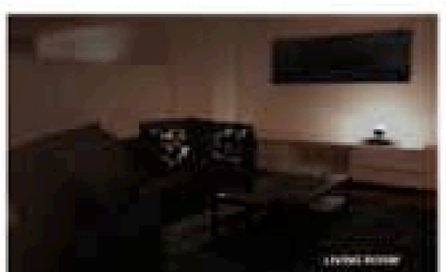
TECHNOLOGY OF MAGNET FLOTATION

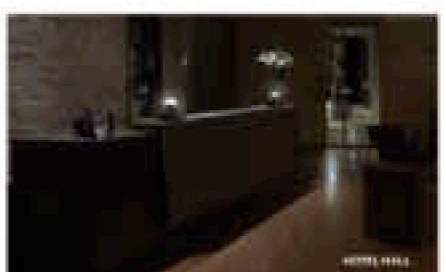
As cornerstone of the project and with the enthusiasm and interest focused on the exploration of new fields in design, we serve the electronics and magnetism to put on our lamp on float.

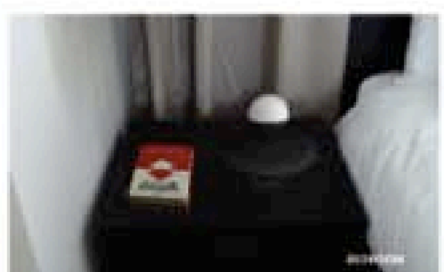
The assembly used to secure the flotation of the technology base used in an existing product on the market, marketed by the Italian company Solegtech. It consists of a set of permanent magnets and electromagnets, carefully distributed at the base and the ball levitating. Electromagnets, only present at the base, are controlled electronically through a magnetic field sensor that detects when a variation of the magnetic flux happens and is adequately compensated by distributing electric current to the electromagnets. In schematic form, the permanent magnets create a region in which the magnet at the bottom of the ball is levitating in a state of unstable equilibrium. Just this instability is that correct electromagnets.

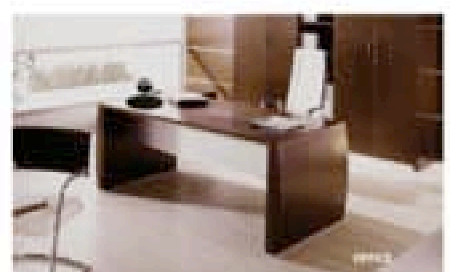
By using high-frequency alternating current for power transmission by electromagnetic induction is not altered the rate of levitation, so for being depending of independent electronic circuits can both be operating separately. So it's possible that ball (lamp) was found floating but off, supported at the base but turned on, supported at the base and off or, finally, the settings more showy: floating in and turned on.

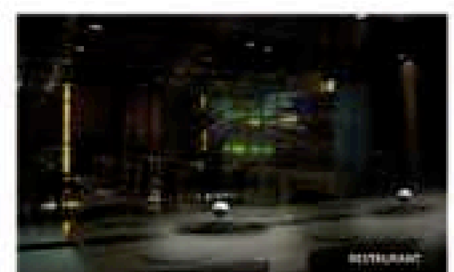
APPLICATION

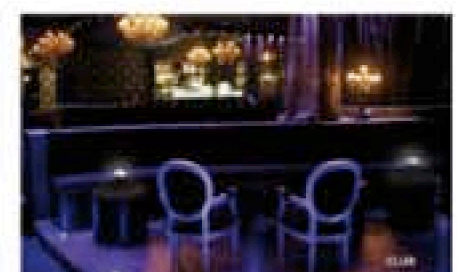












ATMOSPHERE LAMP FLOATING BY MAGNETISM THAT GIVES ENERGY TO POWER A LED USING MAGNETIC INDUCTION.

INNOVATION AND ORIGINALITY IDEA

SIMPLE AND REFINED AESTHETICS

USE OF NEW TECHNOLOGIES AND EFICIENCY OF LIGHTING ELEMENTS

STRONG CONCEPT ABLE TO INTRODUCE IN A LOT OF SITUATIONS

Project develop for 2008 LEDONE AWARD DESIGN, INTERNATIONAL DESIGN COMPETITION, LIGHTING DESIGN

Name of project: FLOTA

Designers: Adrià García i Mateu and Marc Fabra i Ferrer as **Marc Fabra & Adrià GM** students of Elisava, Escola de Art i Disseny from Barcelona

FLOTA