(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) EP 2 266 707 A1

(12) EUROPEAN PATENT APPLICATION

(43) Date of publication:
29.12.2010 Bulletin 2010/52

(51) Int Cl.:
B05B 17/08 *(2006.01)* ***F21S 8/00*** *(2006.01)*

(21) Application number: **10382178.1**

(22) Date of filing: **23.06.2010**

(84) Designated Contracting States:
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR
Designated Extension States:
BA ME RS

(30) Priority: **23.06.2009 ES 200901032 U**

(71) Applicant: **Pérez Murcia, Narciso**
30800 Lorca (ES)

(72) Inventor: **Pérez Murcia, Narciso**
30800 Lorca (ES)

(74) Representative: **Martin Santos, Victoria Sofia**
UDAPI & Asociados
Patentes y Marcas
Explanada, 8
28040 Madrid (ES)

(54) Ornamental fountain with an incorporated light projector

(57) The object of the present invention is an ornamental fountain with an incorporated light projector (10). This is, it relates to a fountain that shoots out water having incorporated in the same assembly some means for projecting light. The present invention is characterised by the special configuration and design of the elements that make up the ornamental fountain object of the invention, allowing to integrate all the elements in a single assembly (2) provided with means for collecting water (3,11), so that the ornamental fountain of the invention is easy to install and repair.

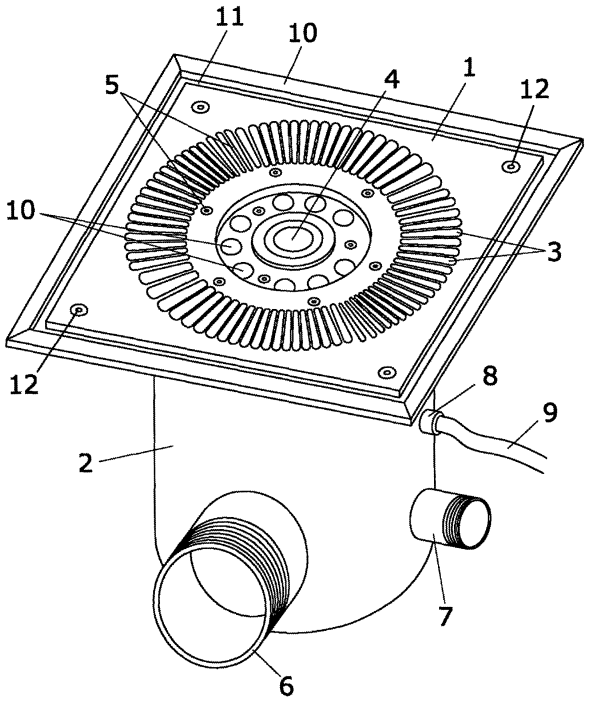

FIG.1

EP 2 266 707 A1

Description

OBJECT OF THE INVENTION

[0001] The object of the present invention is an ornamental fountain with an incorporated light projector. This is, it relates to a fountain that shoots out water having incorporated in the same assembly some means for projecting light.

[0002] The present invention is characterised by the special configuration and design of the elements that make up the ornamental fountain object of the invention, allowing to integrate all the elements in a single assembly provided with means for collecting water, so that the ornamental fountain of the invention is easy to install and repair.

[0003] Therefore, the present invention lies in the field of ornamental fountains and specifically that of fountains in which are integrated means for projecting light.

BACKGROUND OF THE INVENTION

[0004] Ornamental fountains with associated light projection means exist in the market. However, suffer from a drawback, as they are designed and conceived so that water is collected in a collection box, with the ensuing inconvenience and problems.

[0005] The problems resulting from using a collection box to collect the water in an ornamental fountain with associated luminous means are several. Firstly, those related to having elements that do not conform a single assembly, requiring to fit the collection box; secondly, the connection and attachment of the ornamental fountain; thirdly, a difficulty related to using collection boxes in installations on frames or roofs with a reduced thickness, which do not have enough space to install a collection box.

[0006] Therefore, the object of the present invention is to overcome the aforementioned drawbacks, developing for this purpose an ornamental fountain with incorporated luminous means in a single assembly as claimed, which prevents the use of elements mounted and attached separately, such as a water collection box.

DESCRIPTION OF THE INVENTION

[0007] The invention of an ornamental fountain with a light projector integrated in it basically comprises a removable cover that is attached to a peripheral frame. Disposed on the cover are the water projection nozzles, the water collection grooves and the light projection means.

[0008] Between the removable cover and the peripheral frame, once the assembly is put together, a peripheral channel is defined for collecting water which, together with the radial grooves of the cover, increase the capacity for collecting the projected water.

[0009] To the combination of the frame and removable cover allows not mounting the covers during the construction work, with the resulting risk, and finishing the flooring with the frames in their final position. In addition, as mentioned above, it increases the collection capacity of the ornamental fountain.

[0010] Associated to said cover is a deposit with sufficient size and a design such that it has an inlet for supplying the water to be projected through the nozzles, and an outlet for the water collected in the upper openings of the covers for temporary storage in the deposit. Finally, the bottom deposit fitted under the cover has an inlet for the power supply leads of the light projection means.

[0011] The structural association of the cover with a deposit allows collecting water inside the deposit without having to employ an additional means such as a collection box or the like, the two being attached by screws.

[0012] In addition, inside the deposit are disposed the water and light connections and it is possible to access them through the removable cover, which is screwed onto the deposit.

[0013] The arrangement of the above-described elements allows obtaining water projection means with incorporated illumination on which it is possible to walk, which can be integrated in any type of stone or natural pavement. In addition, the possible arrangement of the nozzles centered with respect to the illumination means creates a fully symmetrical illumination, with constantly changing hues.

DESCRIPTION OF THE FIGURES

[0014] To complete the description provided below and to aid a better understanding of the characteristics of the invention, the present descriptive memory is accompanied by a set of drawings representing the most significant details of the invention for purposes of illustration only and in a non-limiting manner.

[0015] Figure 1 shows a representation of the ornamental fountain with light projection means integrated in them object of the invention.

PREFERRED EMBODIMENT OF THE INVENTION

[0016] A description is made below with reference to the figures of a preferred embodiment of the proposed invention.

[0017] Figure 1 shows how the ornamental fountain basically comprises a removable cover (1) attached to a frame (10), this removable cover (1) being associated to a deposit.

[0018] Between the frame(10) and the removable cover (1) is defined a peripheral channel (11) that connects to the inside of the deposit, providing a means for collecting the projected water towards the inside of the deposit (2).

[0019] The removable cover (1) has at least one nozzle (4) for projecting water, light projection means such as LEDs (10), and a series of longitudinal grooves or open-

ings (3) disposed radially to collect the water towards the inside of the deposit (2).

[0020] The grooves or openings (3) can have any shape, but preferably their width should not be greater than 8mm to prevent the entry of a cigarette butt or the heel of a shoe. These grooves or openings (3) have a longitudinal shape and are disposed radially.

[0021] The disposition of the grooves or openings (3) is radial so that they surround the light projection means (10), while these in turn surround at least one water projection nozzle (4) disposed centered on the cover.

[0022] The removable cover (1) is attached to the deposit by attachment screws (5), which allows removing the cover and provides access to the water and light connections, not shown. In addition, screws (12) are used to attach the cover (1) to the frame 810), leaving a space in which the water runs under the cover from the peripheral channel (11) to the inside of the deposit (2). In one possible embodiment of the invention these screws (12) run inside some pivots, not shown, that act as separators or spacers between the cover and the frame in order to allow the water to pass towards the inside of the device.

[0023] The deposit (2) has a water inlet pipe (6) and a water outlet pipe (7) for the water collected in the deposit through the openings (3). Finally, on top of the deposit is another inlet (8) for the power supply leads (9) of the light projection means.

[0024] The essence of the invention is not altered by changes in the materials, shape, size and arrangement of its component elements, described in a non-limiting manner such that it can be reproduced by one skilled in the art.

Claims

1. Ornamental fountain with according to claim 1, **characterised in that** light projector, **characterised in that** it comprises:

   • a removable cover (1) attached on
   • a deposit (2) and on
   • a peripheral frame (10), wherein
   the removable cover presents:

      at least one water projection nozzle (4);
      at least one opening or orifice (3) for collecting the projected water;
      some light projection means(10);
      some attachment screws (5) for attaching the cover (1) to the deposit (2);
      some attachment screws (12) that attach the cover (1) to the frame (10);

   and the deposit (2) is provided with:
   • a water inlet pipe (6);
   • an outlet pipe (7) for the water collected in the deposit through the openings (3);
   • an inlet (8) for the power supply leads (9) of the light projection means (10); and
   between the frame (10) and the removable cover (1) is defined a peripheral channel (11) for collecting water that is directly connected to the inside of the deposit (2).

2. Ornamental fountain with an incorporated light projector, according to claim 1, **characterised in that** the shape of the grooves or openings (3) have a width not greater than 8 mm.

3. Ornamental fountain with an incorporated light projector, according to claim 1, **characterised in that** the disposition of the grooves or openings (3) on the cover is such that they surround the light projection means (10), while these surround at least one water projection nozzle (4), which are disposed centered on the cover.

4. Ornamental fountain with an incorporated light projector, according to claim 1, **characterised in that** the screws (12) run inside some pivots.

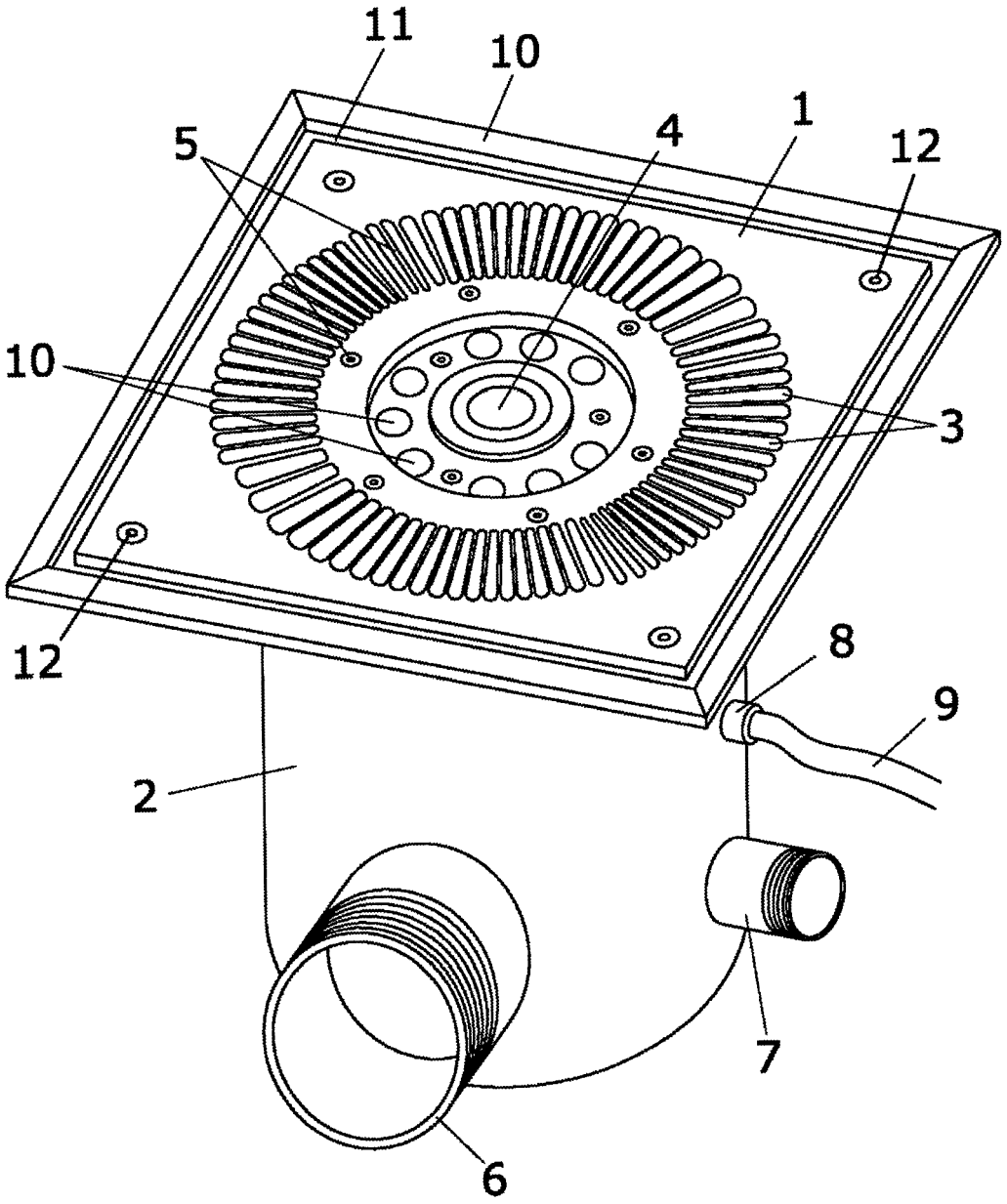

FIG.1

Europäisches Patentamt
European Patent Office
Office européen des brevets

EUROPEAN SEARCH REPORT

Application Number
EP 10 38 2178

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 2006/175424 A1 (TATUM PRESTON A [US] ET AL) 10 August 2006 (2006-08-10) * paragraphs [0007], [0017] - [0018] * -----	1-4	INV. B05B17/08 F21S8/00

TECHNICAL FIELDS SEARCHED (IPC)

B05B
F21S

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	27 August 2010	Roldán Abalos, Jaime

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
Y : particularly relevant if combined with another document of the same category
A : technological background
O : non-written disclosure
P : intermediate document

T : theory or principle underlying the invention
E : earlier patent document, but published on, or after the filing date
D : document cited in the application
L : document cited for other reasons

& : member of the same patent family, corresponding document

1

EPO FORM 1503 03.82 (P04C01)

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 10 38 2178

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

27-08-2010

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2006175424 A1	10-08-2006	NONE	

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82