



EUROPEAN PATENT APPLICATION

Application number: **91200060.1**

Int. Cl.⁵: **F21V 7/04, F21V 7/09**

Date of filing: **14.01.91**

Priority: **02.02.90 NL 9000264**

Date of publication of application:
07.08.91 Bulletin 91/32

Designated Contracting States:
AT BE CH DE DK ES FR GB GR IT LI LU NL SE

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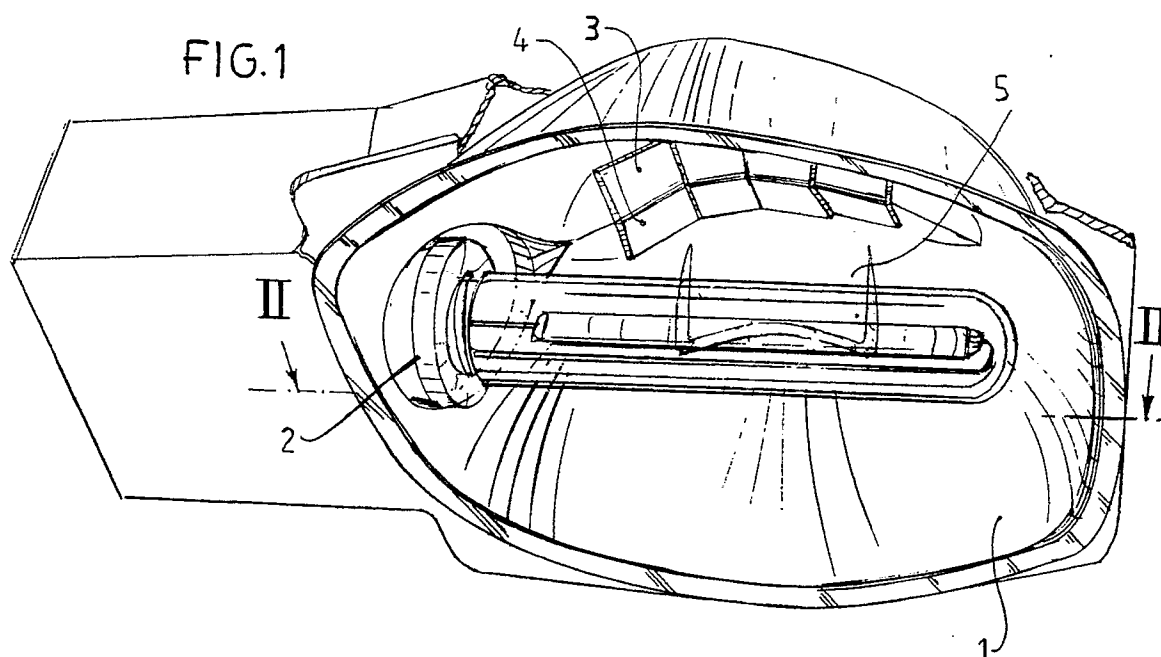
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Reflector.

For lighting, particularly in glass horticulture, as-
 simulation lighting is applied to improve the quality
 the crop. In order to obtain the most regular possible
 progression of the light output, which is expressed in
 the polar diagram, a reflector is used according to
 the invention. The reflector (1) has a central length-

wise plane where the lighting element is placed,
 while relief surfaces (3,4,5) are arranged on either
 side of planes of symmetry passing through the
 centre point of the reflector (1). It has been found in
 practice that the polar diagram is improved as a
 result of the relief surfaces (3,4,5).



REFLECTOR

The invention relates to a reflector for diffusing light as uniformly as possible.

Assimilation lighting is applied particularly in glass horticulture. Due to this lighting the production of the crop is increased and the quality improved. Especially in the seasons when the natural incidence of light is limited is lighting of vital importance. It is the object of the invention to provide a reflector the light output of which is as uniform as possible. This is expressed by the most regular possible progression of the so-called polar diagram.

This is achieved according to the invention by providing a reflector consisting of an approximately semi-elliptical body cut through along the longitudinal axis and having at least two planes of symmetry standing perpendicular to each other, means for arranging a lighting element at approximately the intersection of the planes of symmetry and, running along the main axis, first relief surfaces arranged on either side of one of the planes of symmetry in the surface of the sphere and second relief surfaces arranged on either side of that plane of symmetry at a greater distance from that plane of symmetry than the first.

Practical tests have shown that a reflector with relief surfaces according to the invention produces a regular polar diagram of the desired form.

According to a preferred embodiment the surface areas of the second relief surfaces are larger than those of the first. The placing of the relief surfaces is also preferably such that these lie symmetrically relative to both planes of symmetry.

The invention is further elucidated with reference to the drawings.

In the drawings:

Fig. 1 shows a perspective view of the reflector according to the invention,

fig. 2 shows a sectional view of the reflector of fig. 1, and

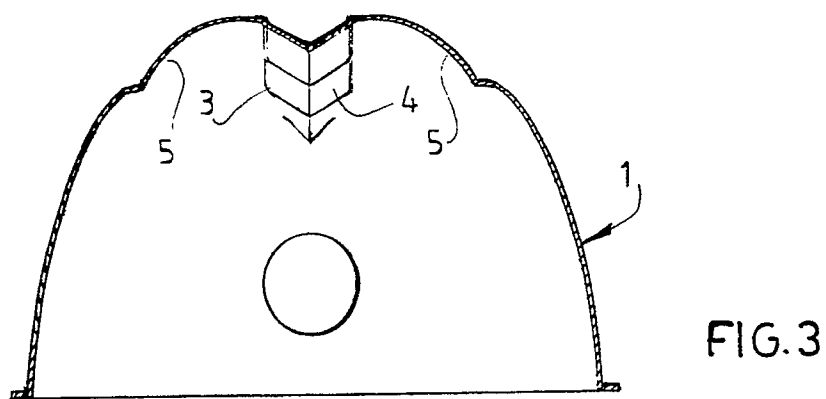
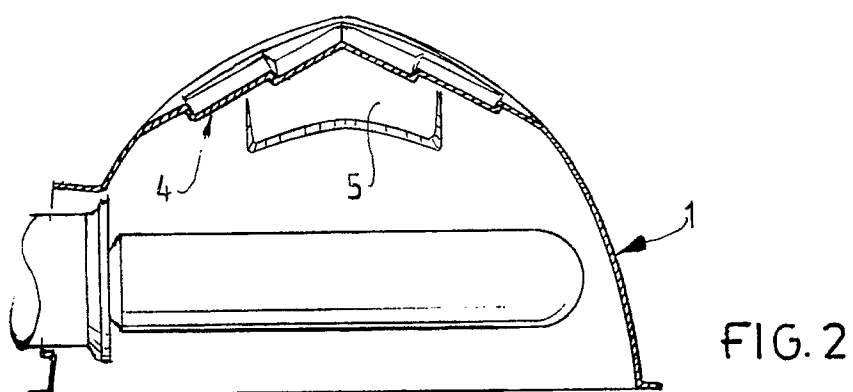
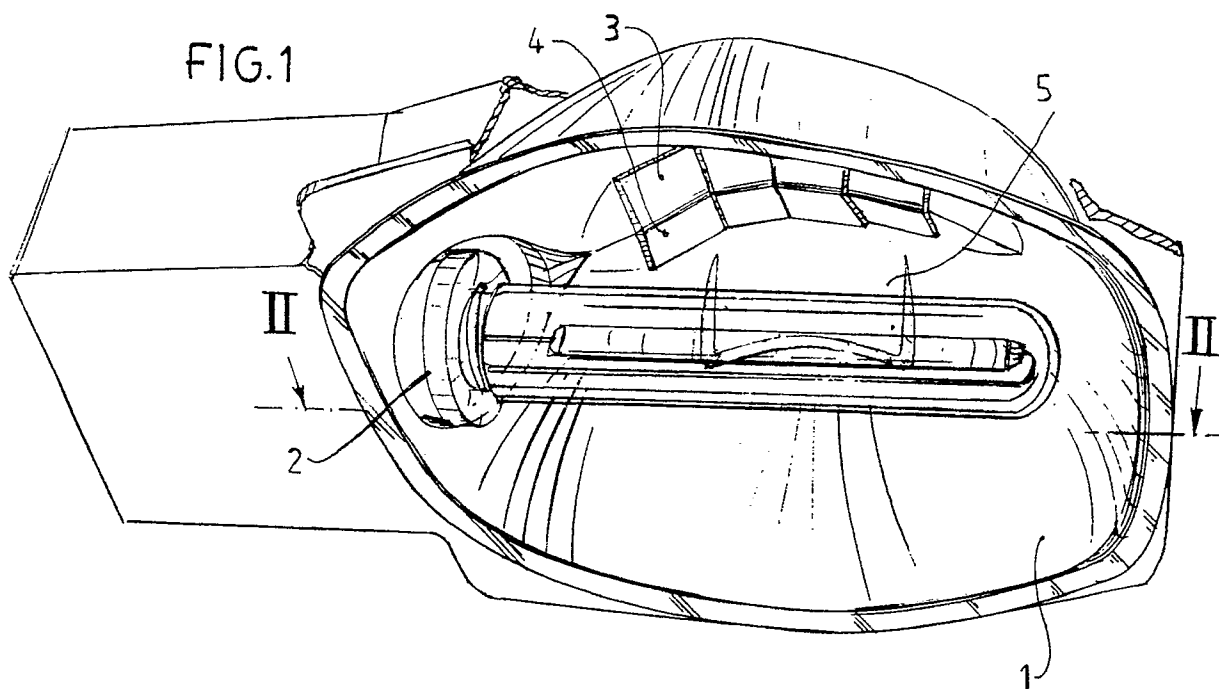
fig. 3 shows a sectional view from a position turned through 90° relative to that of fig. 2.

The reflector 1 has a half sphere-like shape and is provided with connecting means 2 for attaching a light element. In the reflector can be discerned two planes of symmetry standing perpendicular to one another, namely, one plane of symmetry in lengthwise direction and one central section plane of symmetry in a position perpendicular thereto. Series of first relief surfaces 3 and 4 are arranged symmetrically relative to the planes of symmetry. At an interval from the relief surfaces 3, 4 second relief surfaces, one 5 of which is visible, are arranged at a greater distance from the planes of symmetry than the first relief surfaces.

The surface area of the relief surface 5 is chosen larger than the part surfaces of the series of relief surfaces 3 and 4.

5 Claims

1. Reflector (1) consisting of an approximately semi-elliptical body cut through along the longitudinal axis and having at least two planes of symmetry standing perpendicular to each other, means (2) for arranging a lighting element at roughly the intersection of the planes of symmetry and running along the main axis, first relief surfaces (3, 4) arranged on either side of one of the planes of symmetry in the surface of the sphere and second relief surfaces (5) arranged on either side of that plane of symmetry at a greater distance from that plane of symmetry than the first relief surfaces.
2. Reflector as claimed in claim 1, **characterized in that** the first relief surfaces (3, 4) each have a small surface area relative to the second relief surfaces (5).
3. Reflector as claimed in claims 1-2, **characterized in that** the relief surfaces (3, 4, 5) are placed symmetrically relative to both planes of symmetry.





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EUROPEAN SEARCH REPORT

Application Number

EP 91 20 0060

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
X	FR-A-5 479 44 (FONTANON) * page 1, line 55 - page 2, line 15; figures 3, 4 * -- --	1-3	F 21 V 7/04 F 21 V 7/09
A	BE-A-8 849 66 (SYLVAN R. SHERITZ AND ASSOCIATES) * page 3, lines 9 - 12 ** page 5, lines 3 - 8; figure 1 * -- --	1,3	
A	US-A-2 970 208 (KECK) * column 3, lines 37 - 39 ** column 3, lines 71 - 73; figures 1, 2 * -- --	1	
A	NL-A-8 500 300 (POOT LICHTENERGIE) * figure 1 * -- -- -- --	1	
			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			F 21 V
The present search report has been drawn up for all claims			
Place of search		Date of completion of search	Examiner
The Hague		18 April 91	VAN OVERBEEKE J.J.
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			