CLAIMS

1. Industrial lighting device comprising:
- a light source (12);
- a sealed housing (14) containing the light source and comprising:
- a support (20) delimiting a housing window (26) extending opposite the light source;
- a window pane (22) sealing the housing window; and
- a sealing gasket (23) extending along the periphery of the housing window and compressed between the window pane and the support,
- a filter (16) extending in front of the housing window, outside the housing and comprising:
- a frame (30) defining a frame window (36) which is removably fixed to the housing, in an assembled position in which the frame window is opposite the housing window;
- an optical film (38) fixed to the frame and sealing the frame window (36),
the device comprising an elastic compression member (42) arranged between the support and the frame, the elastic compression member (42) comprising a latch (49) which, in said assembled position, is elastically pressed into a catch (50) defined by the support (20) so as to prevent detachment of the filter in a direction perpendicular to the plane of the frame.

2. Device according to the preceding claim, wherein the elastic compression member (42) is arranged so as to elastically press an edge of the frame (30) towards the frame window (36) and/or so as to elastically press the frame against the window pane (22).

3. Device according to any of the preceding claims, wherein in the plane of the frame, the filter (16) is exclusively in elastic contact with the support (20) or with an adjacent filter.

4. Device according to any one of claims 1 and 2, further comprising an elastic compression member (54) that has no latch able to prevent detachment of the filter in a direction perpendicular to the plane of the frame.

5. Device according to the preceding claim,
comprising several said elastic compression members
wherein the frame (30) has a rectangular form and comprises two opposite straight long edges (47) and two opposite straight short edges perpendicular to the long edges,
and wherein each elastic compression member (42) which comprises a latch (49), pressed elastically into a catch (50) defined by the support (20) in said assembled position so as to prevent detachment of the filter in a direction perpendicular to the plane of the frame, is arranged on a said long edge, and each said elastic compression member (54) which has no latch, able to prevent detachment of the filter in a direction perpendicular to the plane of the frame, is arranged on a said short edge, or
wherein each elastic compression member (42) which comprises a latch (49), pressed elastically into a catch (50) defined by the support (20) in said assembled position so as to prevent detachment of the filter in a direction perpendicular to the plane of the frame, is arranged on a said short edge, and each said elastic compression member (54) which has no latch, able to prevent detachment of the filter in a direction perpendicular to the plane of the frame, is arranged on a said long edge.

6. Device according to any of the preceding claims, wherein at least one, preferably each said elastic compression member (42, 54) is rigidly fixed to or made from the material of the frame (30).

7. Device according to any of the preceding claims, comprising several said filters arranged side by side so as to cover the entire housing window.

8. Device according to the preceding claim, wherein said filters have the same dimensions.

9. Device according to any one of the two directly preceding claims, wherein said filters have different optical properties.

10. Device according to any one of the three directly preceding claims, comprising one said elastic compression member (42, 54) arranged between the facing edges of two frames of two filters arranged side by side.

11. Device according to any of the preceding claims, wherein the housing has a protection index to the international standard of the International Electrotechnical Commission of IP 65, IP 66, IP 67 or IP 68.

12. Device according to any of the preceding claims, wherein the frame (30) is composed of two elementary frames (30a, 30b) which are thermo-welded to one another so as to sandwich the optical film (38) between them.

13. Use of a device according to any of the preceding claims, in an environment in which the device is subjected to accelerations greater than 20 g.