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(54) **Electric fireplace**

(57) An electric fire includes a housing (10) having an inlet (11) at or adjacent its lower end for the entry of air into the housing (10), a translucent or transparent screen (17) forming at least part of the front of the housing (10), a fan (13) for causing air to be drawn into the housing (10), an outlet (21) at or adjacent the top of the housing (10) for the discharge of at least a proportion of the air drawn into the housing (10), and an electric heating element (20) in or adjacent the outlet.

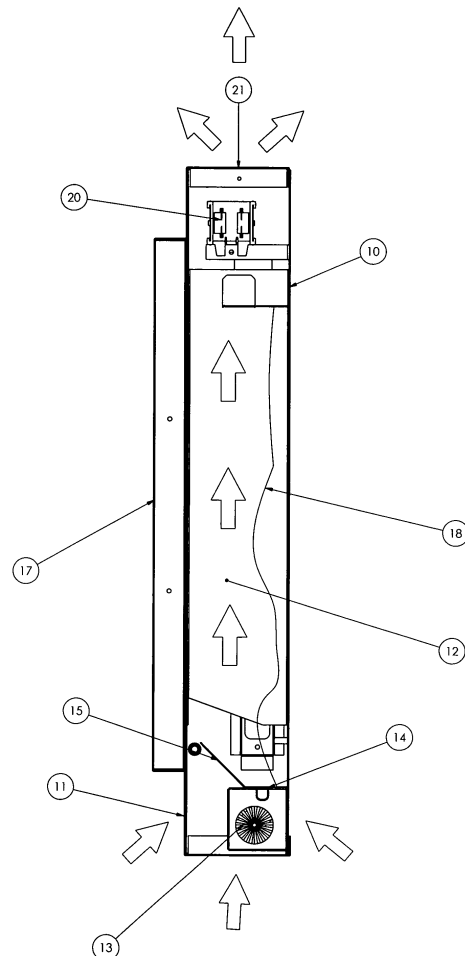


FIGURE 1

EP 1 845 310 A2

Description**Field of the Invention**

[0001] This invention relates to electric fires and it is an object of the present invention to provide an improved form of electric fire.

[0002] A more specific object of the present invention is to provide an electric fire having an improved visual appearance.

[0003] A further object of the present invention is the provision of an electric fire that includes a housing having a relatively small front-to-back dimension and a simpler mechanical construction.

Summary of the Invention

[0004] According to the present invention there is provided an electric fire that includes a housing having an inlet at or adjacent its lower end for the entry of air into the housing, a translucent or transparent screen forming at least part of the front of the housing, a fan for causing air to be drawn into the housing, an outlet at or adjacent the top of the housing for the discharge of at least a proportion of the air drawn into the housing, and an electric heating element in or adjacent the outlet.

[0005] A light source is preferably contained within the housing adjacent the base thereof. The light source may be disposed behind a material giving the appearance of a burning fuel effect.

[0006] A reflector is preferably disposed at the rear of the housing and the reflector is preferably in the form of a sheet of flexible reflective material suspended from a position towards the top of the housing.

[0007] The arrangement is preferably such that, as air is caused to flow upwardly through the housing from the inlet towards the outlet, the sheet of flexible reflective material is caused to adopt a sinuous or undulating motion providing an enhanced visual effect.

[0008] The air that is caused to flow upwardly through the housing to produce movement of the sheet of flexible reflective material is thus the same air that is heated by contact with the electric heating element, i.e. the heated air discharged into the room in which the electric fire is located has previously caused the sheet of flexible reflective material to move with a "ripple" action to provide the enhanced visual effect.

[0009] The sheet of flexible reflective material may be coloured or decorated to provide an attractive appearance.

[0010] By locating the electric heating element in or adjacent the outlet of the housing, i.e. at the top of the heater, with the fan located adjacent the bottom of the housing, the possibility of over-heating of the any of the electric control or operating elements located adjacent the base of the heater is avoided.

Brief Description of the Drawings**[0011]**

Figure 1 is a vertical sectional view of an electric fire, and

Figure 2 is a perspective sectional view of the electric fire.

Description of the Preferred Embodiment

[0012] As shown in the drawings, the electric fire of the present invention includes a housing 10 that is generally rectangular in front view and has an inlet 11 formed in its base for the entry of air into a chamber 12 contained within the housing 10. The air is drawn into the chamber 12 by means of a fan 13 driven by an electric motor and the fan 13 is located at the base of the housing 10, just below a shelf 14 on which is supported a light source 15. For a relatively wide electric fire, two fans may be provided, one adjacent each side of the housing 10.

[0013] The majority of the front of the housing 10 is provided by a screen in the form of a sheet 17 of translucent or transparent material and the rear of the housing 10 is solid. Just in front of the rear of the housing there is a sheet 18 of flexible reflective material and the sheet 18 is so positioned that, as the air drawn into the chamber 12 flows upwardly, the airflow creates a ripple effect in the sheet 18. This undulating or sinuous motion of the sheet 18 of flexible reflective material produces varying patterns in the light reflected from the sheet 18 and can be seen through the sheet 17 of translucent or transparent reflective material forming the majority of the front of the housing 10.

[0014] The upper end of the housing 10 can be of tapering or straight form and there is an outlet 21 at the top of the housing 10. The outlet 21 is in the form of an opening that contains an electric heating element 20. The air issuing from the outlet opening is thus heated just before it is discharged into the room in which the electric fire is located. The positioning of the electric heating element 20 at the upper end of the housing 10 ensures that it is spaced as far as possible from the fan 13, thereby avoiding any possible over-heating of any of the electric control or operating elements located adjacent the base of the electric fire.

[0015] As can be seen from the drawings, the electric fire has relatively low front-to-back dimensions, making it ideally suited for mounting on a wall at an appropriate height such as to ensure that the enhanced visual effect can be seen by all those in the room in which it is located.

Claims

1. An electric fire that includes a housing (10) having an inlet (11) at or adjacent its lower end for the entry

of air into the housing (10), a translucent or transparent screen (17) forming at least part of the front of the housing (10), a fan (13) for causing air to be drawn into the housing (10), an outlet (21) at or adjacent the top of the housing (10) for the discharge of at least a proportion of the air drawn into the housing (10), and an electric heating element (20) in or adjacent the outlet (21). 5

2. An electric fire as claimed in Claim 1, in which a light source (15) is contained within the housing (10) adjacent the base thereof. 10
3. An electric fire as claimed in Claim 2, in which the light source (15) is disposed behind a material giving the appearance of a burning fuel effect. 15
4. An electric fire as claimed in any one of the preceding claims, in which a reflector (18) is disposed at the rear of the housing (10). 20
5. An electric fire as claimed in Claim 4, in which the reflector (18) is in the form of a sheet of flexible reflective material suspended from a position towards the top of the housing (10). 25
6. An electric fire as claimed in Claim 5, in which the arrangement is such that, as air is caused to flow upwardly through the housing (10) from the inlet (11) towards the outlet (21), the sheet (18) of flexible reflective material is caused to adopt a sinuous or undulating motion providing an enhanced visual effect. 30
7. An electric fire as claimed in Claim 5 or Claim 6, in which the sheet (18) of flexible reflective material is coloured or decorated to provide an attractive appearance. 35

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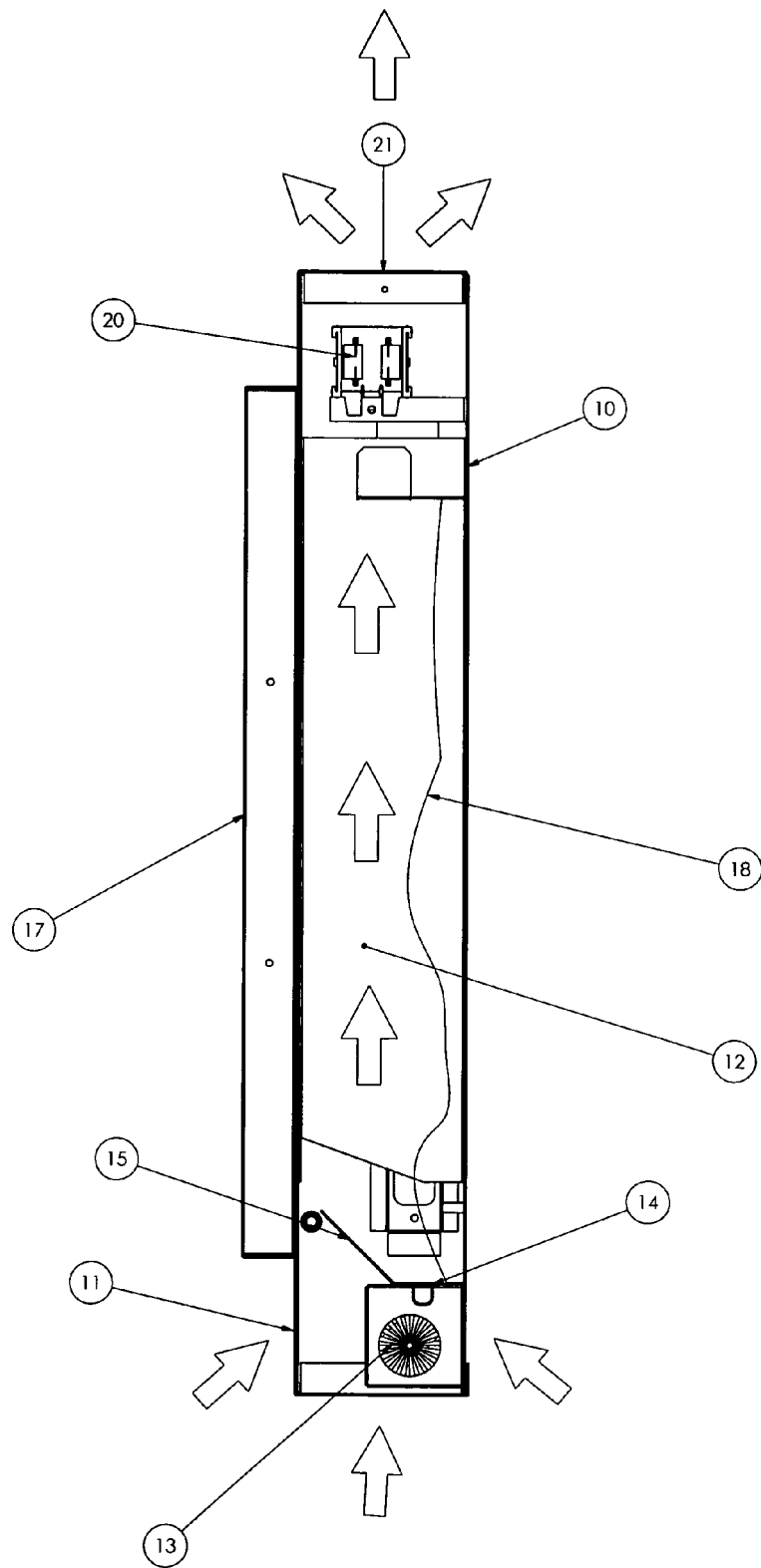


FIGURE 1

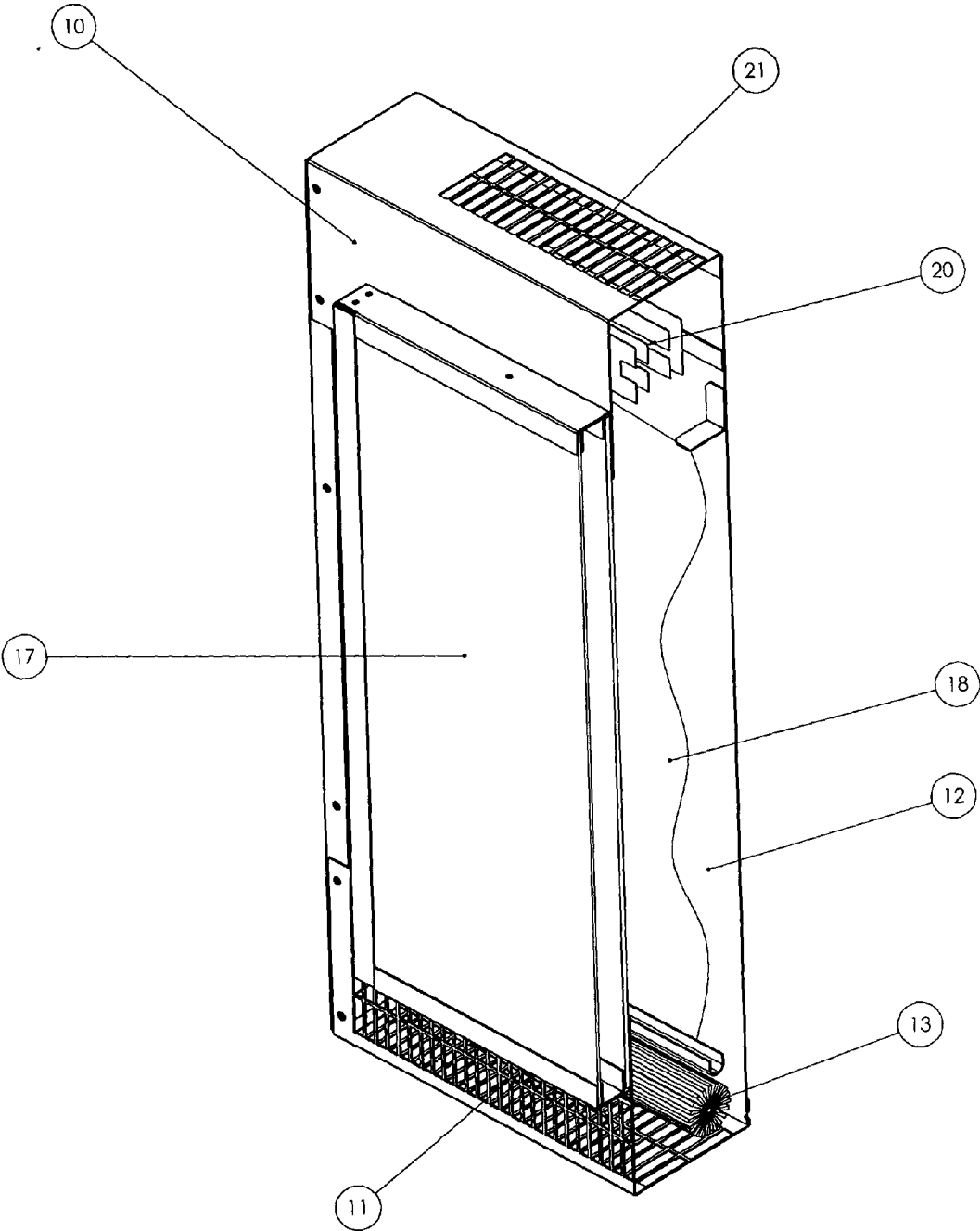


FIGURE 2