



(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication:
29.08.2007 Bulletin 2007/35

(51) Int Cl.:
B66C 1/10 (2006.01) B66C 1/66 (2006.01)

(21) Application number: **07250425.1**

(22) Date of filing: **01.02.2007**

(84) Designated Contracting States:
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR
Designated Extension States:
AL BA HR MK YU

(30) Priority: **24.02.2006 GB 0603761**

(71) Applicant: **Cummins Power Generation Limited**
Ramsgate, Kent CT12 5BF (GB)

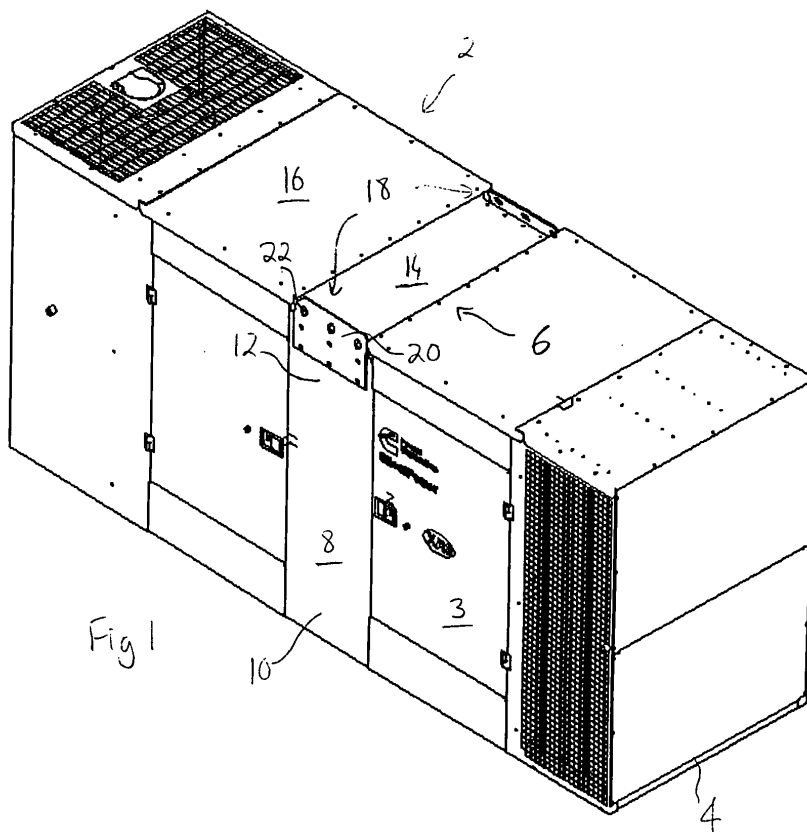
(72) Inventors:
• **Matthews, James c/o Cummins Power Generation Ltd.**
Ramsgate, Kent CT12 5BF (GB)
• **Juden, Stephen c/o Cummins Power Generation Ltd.**
Ramsgate, Kent CT12 5BF (GB)

(74) Representative: **Hector, Annabel Mary et al**
fJ Cleveland
40-43 Chancery Lane
London WC2A 1JQ (GB)

(54) **Plant enclosure**

(57) A plant comprising a machine such as a power generator housed in an enclosure (12), the enclosure having a recess (14) or channel across the top thereof. A pair of apertured plates (18) forming lifting eyes (22)

for the plant are connected to side stropps (8) of a lifting frame (6), and extend within the recess at the top of the enclosure. Thus the lifting eyes do not project outside the dimensions of the enclosure, such that the plant may be stacked one on top of another.



Description

[0001] This invention relates to plant comprising a machine in an enclosure, such as power generation plant. Such plant commonly has one or more lifting members or eyes for moving the plant.

[0002] In such plant, the machine typically comprises large and heavy components such as a fuel tank, engine and alternator mounted on a base. These are commonly housed within an enclosure for protection and to reduce noise, which enclosure is conveniently cuboid in shape. Such an enclosure may be made of sheet material, and normally has a strengthened lifting frame extending from the base around the top of the enclosure. One or more lifting eyes may be attached to the top of the frame for connection to a lifting means such as a hook attached to a crane for moving the plant.

[0003] A problem with this arrangement is that the plant are not stackable one on top of another due to the lifting eye protruding from the top, which places restrictions on storage and shipping. For example it restricts the number of plant enclosures which may fit in a shipping container. Because of safety considerations, the lifting eyes can not be made to be easily removable.

[0004] According to the present invention there is provided a plant comprising a machine in an enclosure, the machine being fixedly mounted on a base of the enclosure, and the enclosure comprising: a lifting frame in operable connection with the base; at least one recess formed in a wall of the enclosure at or adjacent the top of the enclosure; and at least one lifting member connected to the frame and being located substantially within the recess so as not to extend beyond the top of the enclosure. With this arrangement, the plant may be stacked upon each other.

[0005] Preferably the lifting member is in the form of a lifting eye. The eye member may for example be a plate member. A pair of plate members may be provided, each for attachment adjacent opposite sides of the enclosure. Conveniently, the recess may take the form of a channel across the top of the enclosure, having a width sized to receive the width of the plate members. The lifting frame may comprise a pair of opposed upright side members or strops, the plates being attached at or adjacent the top of each side member.

[0006] For example the plates may be bolted to the sides of the enclosure, and be angled inwardly at their top portions into the channel.

[0007] The invention will now be described with reference to the accompanying drawings in which:

Figure 1 is perspective view of a plant according to one embodiment of the invention;

Figure 2 is an enlarged view of part of the enclosure of Figure 1; and

Figure 3 is an enlarged side view partly broken away of the enclosure of Figure 1.

[0008] Referring to the Figures, the plant comprises an enclosure 2 which is substantially cuboid in shape, comprising a sound attenuated/weather enclosure. This may be formed of thin metal sheet. The enclosure 2 has a base 4 on which the elements of the machine such as a power plant are fixedly mounted. For example, these may comprise a fuel tank, an engine, a radiator, and an alternator (not shown). The enclosure may include one or more doors 3 for providing access to the components.

[0009] A lifting frame 6 comprises a pair of opposed upright side members or strops 8, each connected to opposite sides of the base 4 at the lower end 10 thereof. The strops 8 are connected at their upper ends 12 to a recessed cover plate 14 in the top wall of the enclosure 2. This is in the form of a shallow channel member, forming a recess between the top cover plates 16 of the enclosure 2, on either side thereof.

[0010] Lifting members are provided by a pair of lifting eyes 18, for connecting the enclosure to a lifting means such as a crane hook for moving the plant enclosure. The eye members are rectangular plate members 18 each including one or more apertures 22 forming lifting eyes adjacent the top edge 20 thereof. The plates 18 have a width slightly smaller than the width of the recess formed by the recessed cover member 14 of the lifting frame 6. They are secured to the top end 12 of each strop 8 of the lifting frame 6 with the top edge 20 projecting from the corner of the lifting frame upwards within the height of the recess.

[0011] The projecting edge 20 of each eye member 18 may be angled inwardly so as further to reduce any encroachment outside of the dimensions of the enclosure 2. The enclosures may thus be stacked one on top of the other, leading to advantages in the transport and storage thereof.

Claims

1. A plant comprising a machine in an enclosure, the machine being fixedly mounted on a base of the enclosure, and the enclosure comprising: a lifting frame in operable connection with the base; at least one recess formed in a wall of the enclosure at or adjacent the top of the enclosure; and at least one lifting member connected to the frame and being located substantially within the recess so as not to extend beyond the top of the enclosure.
2. A plant as claimed in claim 1, in which the recess comprises a channel formed in the top wall of the enclosure.
3. A plant as claimed in claim 1 or 2, comprising a pair of lifting members located at or adjacent opposite sides of the enclosure.
4. A plant as claimed in claim 3 in which the lifting frame

comprises a pair of opposed upright members, the lifting members being attached at or adjacent the top of each upright member.

5. A plant as claimed in any preceding claim, in which the or each lifting member comprises an eye member. 5
6. A plant as claimed in claim 5, in which the eye member is a plate having at least one aperture. 10
7. A plant as claimed in claim 6, in which each plate is secured to a side wall of the enclosure, and is angled inwardly of the side into the recess. 15
8. A plant as claimed in any preceding claim, in which the or each lifting member is connected to the frame by at least one bolt.
9. A plant substantially as described herein, with reference to the accompanying drawings. 20

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