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(54) **An assembly comprising generator built into an standard container**

(57) A kit comprising a generator built into a standard container, said container comprising an access door (1) and several supply connections.

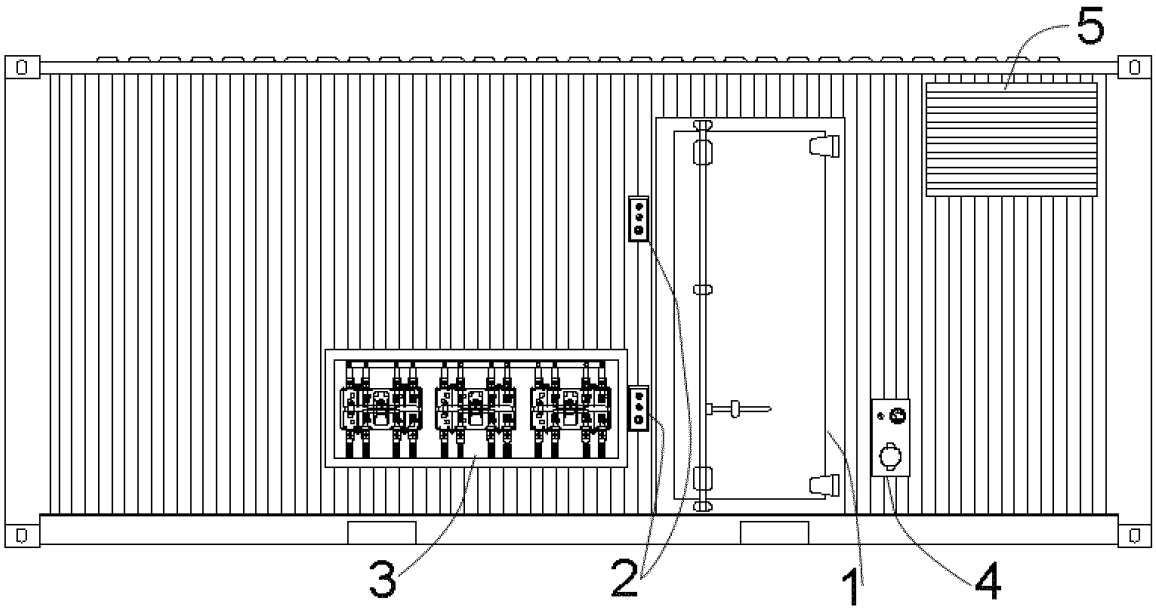

Fig.1

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Description

OBJECT OF THE INVENTION

[0001] The object of the present patent invention is to present a new electric energy generator built into a standard container, the external dimensions of which comply with ISO regulation.

[0002] This new generator built into a standard container is particularly applicable to both the transportation sector (roadways, railways and maritime transportation) and to various industrial sectors, in which a generator with these characteristics is required.

BACKGROUND OF THE INVENTION

[0003] Various types of generator exist to date, with various technical characteristics, which, according to their purpose, may be more or less powerful or regulated and managed electronically, etc.

[0004] The transportation of perishable products presents certain requirements, so that the load does not deteriorate during its journey. The main requirement to bear in mind with this kind of transportation is to guarantee that the merchandise is kept at the specified temperature, according to the product to be transported. The cold chain must be maintained at all times.

[0005] Refrigerated containers are the best option for transporting merchandise over long distances. These containers are cold units with large dimensions, which mean they are able to transport thousands of kilos of perishable merchandise, whilst supplying the temperature conditions required by the same. These refrigerated containers are also known as "reefers".

[0006] Reefer containers are often used in maritime transportation, thus making it common to see them on cargo ships, which travel all around the world. In order to maintain the required temperature, reefers have pieces of cold equipment, which are connected to the ship's energy source. Refrigerator containers are not only transported by boats but also by cargo planes, which are able to carry them. The majority of these planes carry medicines, which also require specific temperature conditions, in order to prevent their active ingredient from spoiling. In addition to medicines and food, reefer containers are also used to transport flowers and bulbs.

[0007] In addition to transportation by means of ship, these kinds of merchandise are also transported by road. Therefore, tractor units are used, which supply them with fuel so that these storage and cold transportation systems operate as intended.

[0008] In the current state of the art, no generator built into a standard container exists with the technical characteristics described in the present invention patent.

DESCRIPTION OF THE INVENTION

[0009] Generator built into a standard container, essentially composed of a standard container, the external dimensions of which comply with ISO regulation, which functions as a generator, given that it incorporates the adequate technical elements needed to supply electrical current, said container having a number of fuel inlets in its external portion, which indicate the oil level of the motor, as well as a start-up push-button, a stop push-button and an emergency stop button, in addition to a number of fuse holder isolators.

[0010] Said container houses a number of fuel deposits and a generator assembly inside it, along with a control and battery cabinet, in addition to a fuse holder isolator drawer.

[0011] The present invention presents the following advantages:

It is completely independent and self-supplied.

[0012] Since it is a standard container, it may be transported by train, plane and boat.

DESCRIPTION OF THE DRAWINGS

[0013] In order to complement the present description, with the aim of facilitating a better understanding of the invention characteristics, the present descriptive specification is accompanied by a set of figures that form an integral part of the same and serves as a nonlimiting example thereof, wherein:

Figure 1 is an external right hand side view of the generator built into a standard container.

Figure 2 is an external left hand side view of the generator built into a standard container.

Figure 3 is an upper external view of the generator built into a standard container.

Figure 4 is a rear external view of the generator built into a standard container.

Figure 5 is an anterior external view of the generator built into a standard container.

Figure 6 is a plan view of the inside of the generator built into a standard container.

Figure 7 is a side view of the inside of the generator built into a standard container.

Figure 8 is a rear view of the inside of the generator built into a standard container.

PREFERRED EMBODIMENT OF THE INVENTION

[0014] As can be seen in the figures attached, on one side of the external portion, the generator built into a

standard container comprises an access door (1), alongside which a double start-up/stop push-button and an emergency button (2) are located.

[0015] A number of fuse holder isolators (3) are located near to said access door (1).

[0016] There is a fuel inlet (4) in the lower right hand side portion of said side.

[0017] In the upper right hand side area, there is a ventilation grille (5).

[0018] On the opposite side, in the upper left hand side area, there is a secondary ventilation grille (6) and in the lower portion, there is a secondary fuel inlet (7).

[0019] The motor oil level indicator (8) can be found in the right hand side portion.

[0020] In the upper portion of said container, on a side end, there is an upper ventilation grille (9) for the generator assembly (12) exhaust system (13).

[0021] In the rear portion of said container, in a lower right hand side area, the primary feeder outlets (10) can be found.

[0022] In the anterior portion of said container, in the lower right hand side area thereof, the secondary feeder outlets (11) can be found.

[0023] A generator assembly (12) is housed inside said container, joined to an exhaust system (13).

[0024] A series of fuel deposits (14) are located alongside said generator assembly (12), which are joined to a number of fuel channels (15), which communicate with the fuel inlet (4) and the secondary fuel inlet (7).

[0025] At the side of said generator assembly (12) and alongside the side of the container, there is a fuse holder isolator drawer (16) and close to the same, there is a control and battery cabinet (17).

[0026] Having sufficiently described the nature of the present invention, as well as one way of putting into practice, it must only be added that variations in form and material may be introduced into this invention, provided that these amendments do not cause the characteristics claimed below to vary substantially.

Claims

1. Generator built into a standard container, **characterised in that** in the external portion of the same, on a side thereof, there is an access door (1), alongside which a double start-up/stop push-button and an emergency button (2) are located, a number of fuse holder isolators (3) being located near to said access door (1) and there being a fuel inlet (4) in the lower right hand side portion of said side. In the upper right hand side area, a ventilation grille (5) can be found and on the opposite side, in the upper left hand side area, there is a secondary ventilation grille (6). In the lower portion, there is a secondary fuel inlet (7) and the motor oil level indicator (8) can be found in the right hand side portion. In the upper portion of said container, on a side end, there is an upper ventilation grille (9) for the generator assembly (12) exhaust system (13) and in the rear portion of said container, in the lower right hand side area thereof, the primary feeder outlets (10) are located. In the anterior portion of said container, in the lower right hand side area thereof, the secondary feeder outlets (11) are located and inside said container, a generator assembly (12) is housed, which is joined to an exhaust system (13). Alongside said generator assembly (12), a series of fuel deposits (14) are located, which are joined to a number of fuel channels (15), which communicate with the fuel inlet (4) and the secondary fuel inlet (7). At the side of said generator assembly (12) and alongside the side of the container, there is a fuse holder isolator drawer (16) and near to the same, there is a control and battery cabinet (17).

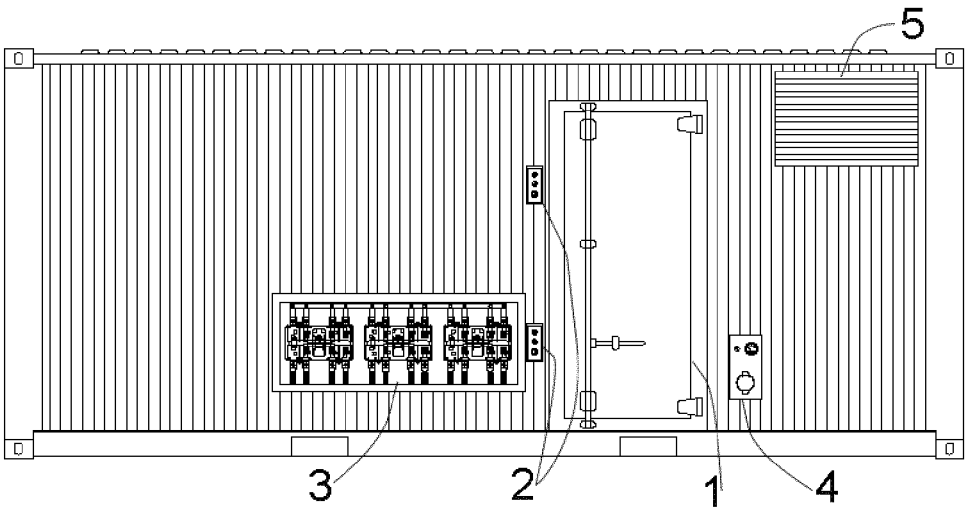

Fig.1

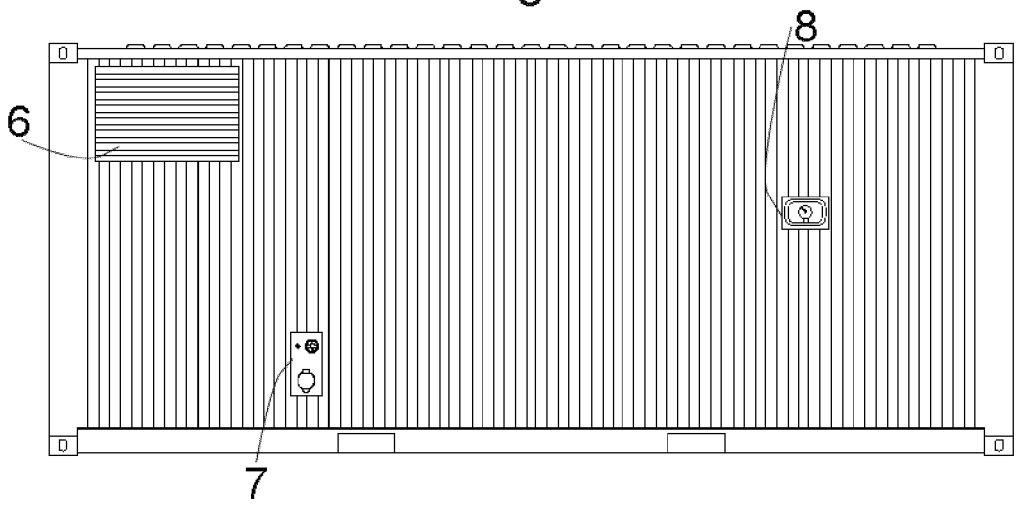

Fig.2

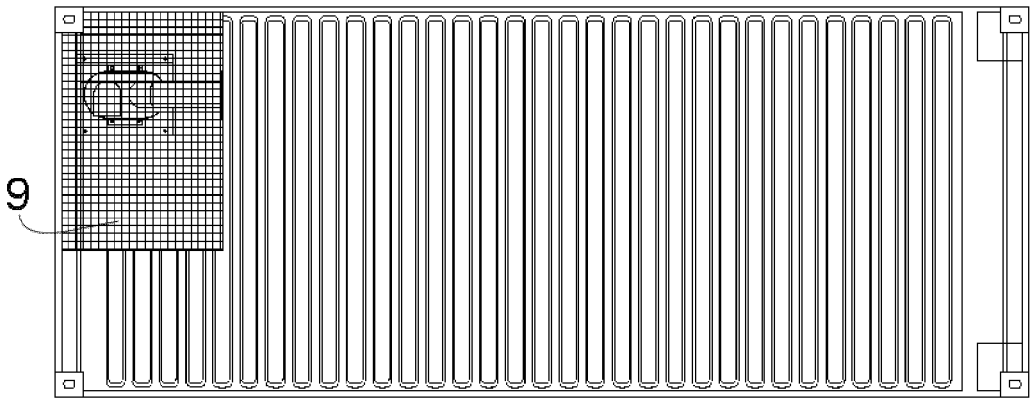

Fig.3

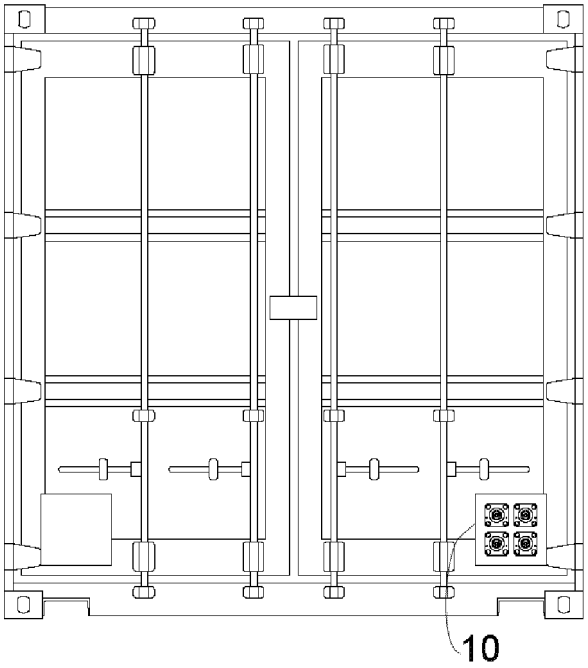

Fig.4

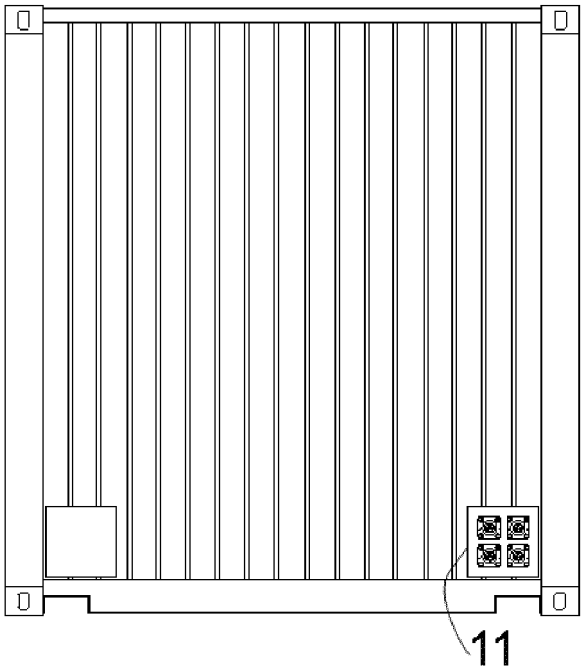

Fig.5

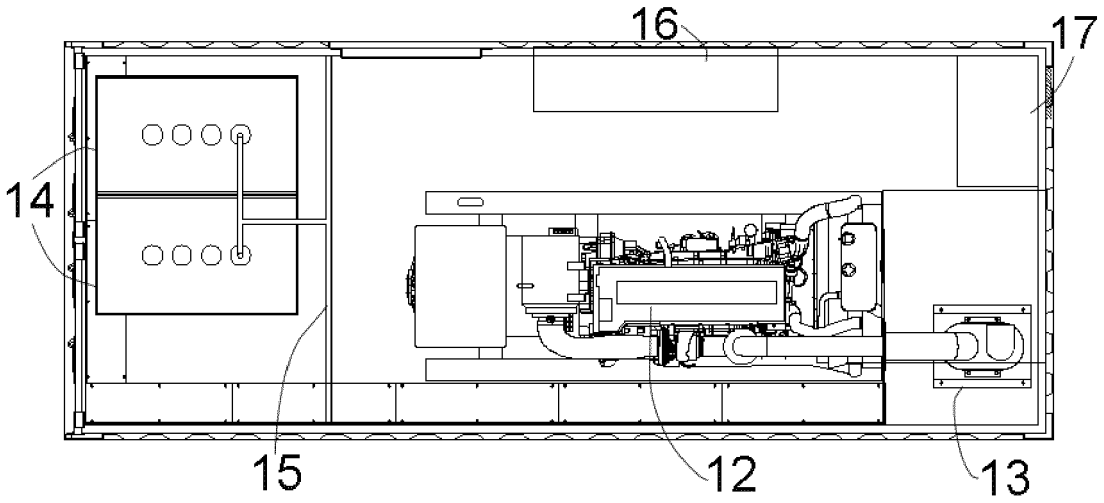

Fig.6

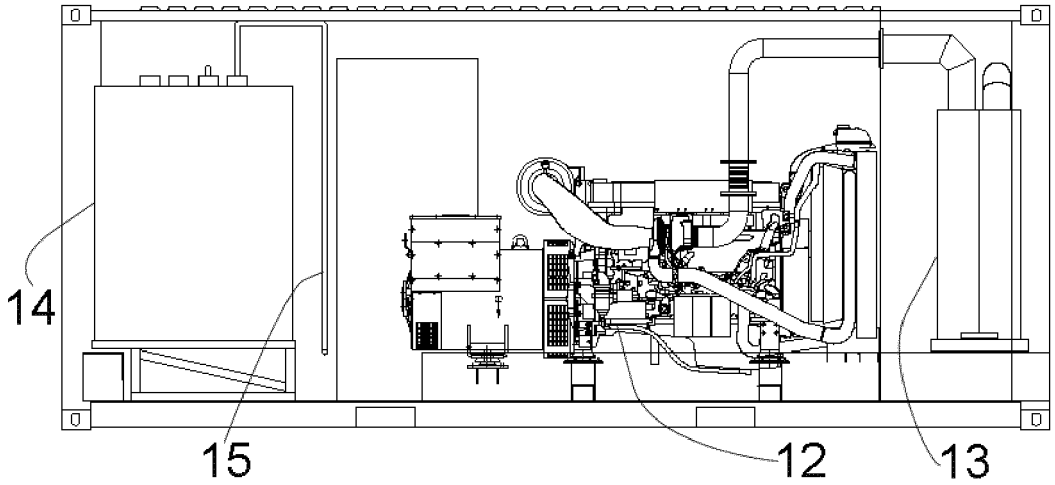

Fig.7

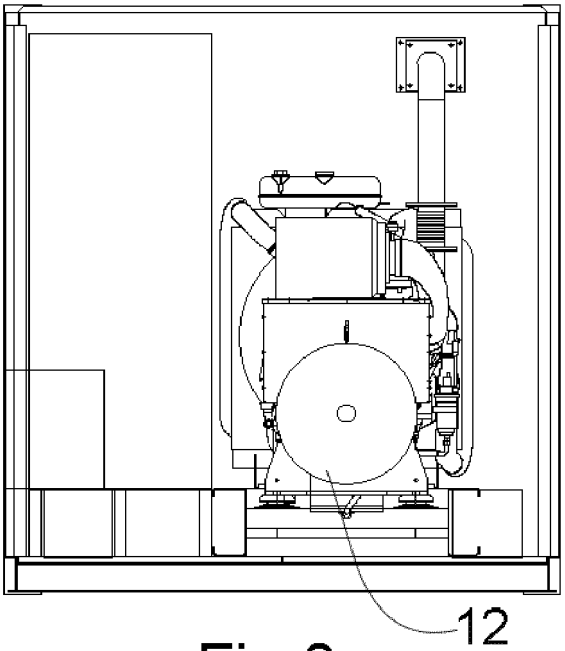

Fig.8

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PARTIAL EUROPEAN SEARCH REPORT

under Rule 62a and/or 63 of the European Patent Convention. This report shall be considered, for the purposes of subsequent proceedings, as the European search report

Application Number
EP 13 38 2499

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	WO 2010/128458 A1 (CANDIRACCI ANGELO [IT]) 11 November 2010 (2010-11-11) * the whole document *	1	INV. E04H5/04 E04H1/12
X	US 2002/189173 A1 (STASCHIK UDO INGMAR [CA] STASCHIK UDO I [CA]) 19 December 2002 (2002-12-19) * the whole document *	1	
X	GB 2 474 944 A (COLT TECHNOLOGY SERVICES GROUP LTD [GB]) 4 May 2011 (2011-05-04) * the whole document *	1	

TECHNICAL FIELDS SEARCHED (IPC)

E04H

INCOMPLETE SEARCH

The Search Division considers that the present application, or one or more of its claims, does/do not comply with the EPC so that only a partial search (R.62a, 63) has been carried out.

Claims searched completely :

Claims searched incompletely :

Claims not searched :

Reason for the limitation of the search:

see sheet C

Place of search	Date of completion of the search	Examiner
Munich	12 November 2014	Valenta, Ivar

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

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INCOMPLETE SEARCH
SHEET C

Application Number
EP 13 38 2499

Claim(s) searched incompletely:
1

Reason for the limitation of the search:

This search report has not been established in respect of certain claims, because they relate to parts of the application that do not comply with the prescribed requirements to such an extent that no meaningful search can be carried out, specifically:
Claim(s) not searched: 1
Reason for the limitation of the search:
The present application contains one claim. Said claim is drafted in such a way that the claim as a whole is not in compliance with the provisions of clarity and conciseness for the following reasons:
Claim 1 has been drafted as part of the description. Since claim 1 contains several sentences and furthermore several passages as e.g. "... the motor oil level indicator can be found ..." (l. 9-10) claim 1 lacks clarity. Hence, it is not clear whether the features mentioned in the respective five sentences belong to the claimed subject-matter and are thus mandatory or whether they are merely optional. It appears that claim 1 discloses extracts from the description, rather than clearly defining the apparatus in terms of its technical features.
Claim 1 contains passages which should be mentioned in the description and therefore render the definition of the subject matters unclear e.g. problems to be solved, listing of alternative embodiments, advantages of certain embodiments.
The search was therefore based on the following subject-matter that, as far as can be understood, could reasonably be expected to be claimed later in the procedure:
A kit comprising a generator assembly build into a standard container, having an access door, a fuel inlet and a ventilation grille: RELEVANT DOCUMENTS: D1 to D3

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 13 38 2499

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
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12-11-2014

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 2010128458 A1	11-11-2010	EP 2427612 A1	14-03-2012
		WO 2010128458 A1	11-11-2010
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GB 2474944 A	04-05-2011	GB 2474944 A	04-05-2011
		WO 2011051655 A2	05-05-2011

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