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**Datasheet for the decision
of 7 November 2006**

Case Number: T 0913/04 - 3.2.03

Application Number: 98108261.3

Publication Number: 0877217

IPC: F25J 3/04

Language of the proceedings: EN

Title of invention:

Cryogenic air separation with warm turbine recycle

Patentee:

PRAXAIR TECHNOLOGY, INC.

Opponent:

LINDE AKTIENGESELLSCHAFT
L'AIR LIQUIDE, S.A. A DIRECTOIRE ET CONSEIL DE SURVEILLANCE
POUR L'ETUDE ET L'EXPLOITATION DES PROCEDES GEORGES CLAUDE

Headword:

-

Relevant legal provisions:

EPC Art. 54, 56, 100(b), 114(1), (2), 123(2)
EPC R. 67

Keyword:

"Novelty (yes)"
"Inventive step (yes)"
"Reimbursement of appeal fee (no)"

Decisions cited:

G 0010/91

Catchword:

-

Case Number: T 0913/04 - 3.2.03

D E C I S I O N
of the Technical Board of Appeal 3.2.03
of 7 November 2006

Appellant I:
(Opponent)

LINDE AKTIENGESELLSCHAFT
Abraham-Lincoln-Straße 21
D-65189 Wiesbaden (DE)

Representative:

Imhof, Dietmar
Linde AG
Zentrale Patentabteilung
Dr.-Carl-von-Linde-Straße 6-14
D-82049 Höllriegelskreuth (DE)

Appellant II:
(Opponent)

L'AIR LIQUIDE S.A. A DIRECTOIRE ET CONSEIL DE
SURVEILLANCE POUR L'ETUDE ET L'EXPLOITATION
DES PROCEDES GEORGES CLAUDE
75 Quai d'Orsay
F-75321 Paris Cedex 07 (FR)

Representative:

Le Moenner, Gabriel
L'AIR LIQUIDE S.A.,
Service Propriété Industrielle
75, quai d'Orsay
D-75321 Paris Cédex 07 (FR)

Respondent:
(Patent Proprietor)

PRAXAIR TECHNOLOGY, INC.
39 Old Ridgebury Road
Danbury, CT 06810-5113 (US)

Representative:

Schwan, Gerhard
Schwan Schwan Schorer
Patentanwälte
Bauerstraße 22
D-80796 München (DE)

Decision under appeal:

**Decision of the Opposition Division of the
European Patent Office posted 25 May 2004
rejecting the opposition filed against European
patent No. 0877217 pursuant to Article 102(2)
EPC.**

Composition of the Board:

Chairman: U. Krause
Members: C. Donnelly
M. Vogel

Summary of Facts and Submissions

I. The appeals lie from the decision of the opposition division dispatched by post on 25 May 2004 to reject the oppositions against European Patent 0 877 217. The notice of appeal was filed, and the appeal fee was paid, by Appellant I (Opponent I) on 27 July 2004 and by Appellant II (Opponent II) on 20 July 2004. The corresponding statements setting out the grounds of appeal were filed on 24 September 2004 and 29 September 2004, respectively.

II. In its statement setting out the grounds of appeal Appellant I (Opponent I) argued that, depending on the interpretation given to claim 1 as granted, either the contested patent does not disclose the invention in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art (Article 100(b) EPC) or the requirements for novelty/inventive step (Article 100(a) EPC) are not met in the light of EP-A-752566 (E1) alone and E1 in combination with US-A-4883518 (E2). Appellant I also contended that the subject-matter of claim 5 is not new in the light of EP-A-0672878 (E4) or US-A-5287704 (E5) or AU-A-20261/95 (E6). Appellant I further requested reimbursement of the appeal fee under Rule 67 EPC because of a serious procedural error by the opposition division in not considering the objection under Article 100(b) EPC.

Appellant II (Opponent II) argued that the subject-matter of claim 5 is not new in the light E4, E5 or E6 and the subject-matter of claim 1 is not inventive in consideration of E4, E5 or E6 in combination with

US-A-5355681 (A1). The arguments concerning inventive step also applied to claim 5.

III. Following a communication pursuant to Article 11(1) RPBA annexed to the summons to oral proceedings, the respondent filed by letter of 4 October 2006 a new main request comprising an amended claim 1 as well as a further auxiliary request.

By letter of 27 October 2006 appellant I requested that, in accordance with Article 10b(3) RPBA, the new requests not be admitted into the proceedings and, should the board decide otherwise, for the oral proceeding to be postponed. Appellant I further objected that the amended claims of the new requests did not meet the requirements of Articles 123(2) and 84 EPC.

IV. Oral proceedings were held on 7 November 2006 and attended by appellant I and the respondent. During these proceedings appellant I maintained the same objections against the new main request as laid out in the grounds of appeal and confirmed the requests for the amended claims of 4 October 2006 not to be allowed into the proceedings, the contested decision to be set aside, revocation of the patent and reimbursement of the appeal fee.

Appellant II indicated in letter of 18 August 2006 that she would not be attending the oral proceedings and filed no further comments or requests beyond that stated in the grounds of appeal for revocation of the patent.

At the oral proceedings the respondent requested maintenance of the patent on the basis of the main request filed with letter of 4 October 2006.

V. Claim 1 according to the main request reads as follows:

" A method for carrying out cryogenic air separation comprising:

(A) compressing feed air in a primary air compressor having a plurality of first through nth compression stages to produce compressed feed air;

(B) passing a first part of the compressed feed air to a main heat exchanger wherein it is cooled by indirect heat exchange with return streams, turboexpanding the cooled first part withdrawn from the main heat exchanger, and passing the turboexpanded first part into a cryogenic air separation plant;

(C) further compressing a second part of the compressed feed air, passing the further compressed second part to the main heat exchanger wherein it is cooled by indirect heat exchange with return streams, turboexpanding at least a portion of the cooled second part withdrawn from the main heat exchanger, reintroducing the turboexpanded second part into the main heat exchanger and recycling at least some of the turboexpanded second part after having partially traversed the main heat exchanger to the feed air between the first and the nth compression stage;

(D) producing liquid oxygen within the cryogenic air separation plant, withdrawing liquid oxygen from the cryogenic air separation plant and passing it through the main heat exchanger wherein it is vaporized by

indirect heat exchange with both the cooling first part of the feed air and the cooling second part of the feed air to produce gaseous oxygen; and

(E) recovering gaseous oxygen as product."

Claim 5 of the main request corresponds to that as granted and reads as follows:

"Apparatus for carrying out cryogenic air separation comprising:

(A) a primary air compressor having a plurality of first through n^{th} compressor stages, a main heat exchanger, a primary turboexpander and a cryogenic air separation plant;

(B) means for passing feed air into the first stage of the primary air compressor and means for withdrawing feed air from the n^{th} stage of the primary air compressor;

(C) means for passing feed air from the n^{th} stage of the primary air compressor to the main heat exchanger, from the main heat exchanger to the primary turboexpander and from the primary turboexpander to the cryogenic air separation plant;

(D) a booster compressor, a secondary turboexpander, means for passing feed air from the n^{th} stage of the primary air compressor to the booster compressor, from the booster compressor to the main heat exchanger, from the main heat exchanger to the secondary turboexpander, and from the secondary turboexpander to the primary air compressor between the first and n^{th} compression stage; and

(E) means for passing liquid oxygen from the cryogenic air separation plant to the main heat exchanger and

means for recovering vapor oxygen from the main heat exchanger."

VI. The arguments of the parties regarding the substantive issues are summarised below.

(a) *Article 84 EPC*

Appellant I maintained that the expression "return streams" has no clear meaning as although the plural form is used it could refer to just one stream.

(b) *Article 123(2) EPC*

Appellant I argued that the feature of "reintroducing the turboexpanded second part into the main heat exchanger" now present in claim 1 of the main request contravened the requirements of Article 123(2) EPC since, in the application documents as originally filed, this characteristic is only disclosed together with the following restrictions:

- the second turbine is the "warm turbine";
- the whole of the second part is warmed after introduction into the main heat exchanger (see figure 1);
- warming of a part of the second part after introduction into the main heat exchanger and cooling of the remainder of the second part after introduction into the main heat exchanger.

As these restrictions are not specified in the amended claim 1 its subject-matter has been generalised and therefore contravenes Article 123(2) EPC.

The respondent replied that a basis for this amendment can be found at column 5, lines 49-52 of the A1 publication which reads "Resulting turboexpanded second part 68 is warmed by partial traverse of the main heat exchanger 17 and then recycled to the primary air compressor between the first and last stages".

Appellant I also objected to the use in claim 1 of the expression "return streams". In the originally filed application this expression refers to all the return streams entering the cold side of the heat-exchanger as shown in figure 1. However, the amended wording of claim 1 now means that heat-exchange may take place with any number of these streams, hence the scope of the claim has been broadened. Further, by stating that the heat-exchange with the return streams, which as originally disclosed only occurred at the warm end of the heat-exchanger, is now also the same heat-exchange step ("the cooling" in paragraph D of claim 1) by which the liquid oxygen is vapourised, the subject-matter of claim 1 has been shifted in scope.

(c) Article 100 (b) EPC, Article 83 EPC

The respondent made no objections against the issue of Article 100(b) EPC being discussed.

Appellant I essentially argued that the skilled person would not know how to carry out the step in paragraph D of claim 1 whereby the liquid oxygen is "vaporized by indirect heat exchange with both the cooling first part of the feed air and the cooling second part of the feed air". The high temperature difference between the air entering the warm turbine and the vaporising liquid

oxygen means that any heat exchange between these two fractions would be highly inefficient and as such technical nonsense within the framework of the problem the contested patent aims to solve (i.e. improvement of the system). Furthermore, in the absence of an explanation to the contrary, the skilled person would conclude that the relatively warm second part of the air can never be in indirect heat-exchange with the liquid oxygen as this would be vapourised long before the entry point to the warm turbine. Hence, the second part of the air cannot participate in the vaporisation of the liquid oxygen as demanded by claim 1 and as a consequence the skilled person would not know how to carry out this step.

In the respondent's view the term "vapourise" cannot be limited to mean a single temperature where the phase change from liquid to vapour occurs, but must be understood as a collective term encompassing a broad range including heating the super-cooled liquid, the phase change itself and the consequent warming of the vapour. To support this argument the respondent referred to document E1 column 5, lines 10 to 17, where reference is only made to "vaporising" to describe the whole transition from super-cooled liquid to warmed vapour.

The respondent further considered appellant I's argument concerning the alleged inefficiency of the process to be irrelevant as this is not a bar to being able to perform the invention as claimed. Consequently, the contested patent gives the skilled person the necessary information to carry out the invention as claimed as required by Article 83 EPC.

(d) *Novelty, Articles 100(a), 54 EPC*

Appellants I and II both argued that the subject-matter of claim 5 is not new with respect to either E4, E5 or E6.

In their analysis of E4 and E6, which describe essentially identical installations, the appellants argued that the conduit A of E4 and the conduit 14 of E6 can both be considered to be suitable as "a means for passing air from the secondary turboexpander (86) to the primary air compressor between the first and nth compression stage". Even if in the flow diagram of E4 it is indicated that the air flows in the opposite sense, the installations are quite capable of being operated with the flow reversed in these conduits. Considering E5, it was suggested in particular that a means for passing feed air from the nth stage (44) of the primary air compressor to the main heat exchanger existed via the booster compressors (46,48).

The respondent was of the view that it is implicit that the conduits A and 14 of E4 and E6 respectively, would be fitted with the necessary control valves etc. to ensure flow in the direction indicated. Additionally, it is not possible simply to reverse the flow direction in these conduits as this would have repercussions on other aspects of the cycle, notably creating a need to break the pressure between the cold and warm turbines. Accordingly, these conduits cannot be seen as being suitable as "a means for passing air from the secondary turboexpander to the primary air compressor between the first and nth compression stage".

As regards E5, the respondent was of the view that this document failed to disclose any recycling of turbine air to an interstage of the primary air compressor. Furthermore, the two turbines of E5 are not separate turbines, but two stages of the same turbine since the exhaust from turbine 50 is the inlet to turbine 52. Similar considerations apply to the two compressors 48 and 46 coupled to these turbines.

(e) *Inventive step - Article 56 EPC*

Appellant I

The method described in E1 differs from the subject-matter of claim 1 only in that the second part of feed air does not pass through the heat-exchanger for cooling prior to turbo-expansion.

There are two products in E1 namely: liquid oxygen and pressurised gaseous oxygen. A large amount of refrigeration is required, as evidenced by the presence of two turbines, to produce the liquid product. If more cooling is required than can be provided by expansion of all the feed-air entering the installation then some air can be recycled in the known manner - in this case more air goes through the turbines than enters the distillation column. The pressurised gaseous oxygen can be produced by either external compression of the vapourised liquid oxygen or by internal compression of liquid oxygen followed by vaporisation at high pressure. Accordingly, there is a need for a vapourising medium and it would be sensible to combine the need for increased refrigeration with that for the vapourising medium.

It has been demonstrated, whilst discussing the objection under Article 100(b) EPC, that the alleged invention will not improve efficiency. Thus, the objective problem can only be one of improving flexibility to cope with other system boundary conditions.

By introducing the second part of the air into the heat-exchanger before turboexpansion a gain in flexibility is achieved as the inlet temperature to the turbine is no longer fixed, but can be selected by varying the take-off point from the heat-exchanger.

When using simulation programmes in the standard manner it is usual to leave such parameters free such that heat-exchanger operation can be optimised within fixed boundary conditions.

It is also known from E2 to use two turbines to expand air taken from different points of the main heat-exchanger, which permits their operation at two different inlet temperatures.

The respondent argued that in E1 the intention is to use the air from the primary and secondary turboexpanders 16 and 20 to feed the high-pressure column 22. As a consequence the outlet pressures of the expanders are not only tied to each other but also to that of the column.

In the method according to claim 1 of the contested patent the exhausts from the turboexpanders are not combined nor does the secondary turboexpander feed

directly into the high-pressure column. By so doing it is possible to optimise not only the operation of the secondary turboexpander but also to divide efficiently the refrigeration produced between the primary and secondary turboexpanders. In particular, the refrigeration demands of the cold end of the heat-exchanger may be displaced towards the secondary turboexpander (the warm turboexpander), which by virtue of its higher operating temperature, means that refrigeration is produced for less power. Such an arrangement also allows more flexibility and in particular enables standard compressor and turboexpanders items, available off the shelf, to be used.

There is no incitement either in E2 or as a result of routine analysis for the skilled person to modify the method according to E1 in order to obtain that of claim 1. E2 in particular does not disclose a recycle to a compressor interstage and does not relate to a product boiler arrangement, wherein liquid oxygen is withdrawn from the plant and then vapourised by indirect heat-exchange with the feed-air that is fed to the turboexpanders. Hence, the refrigeration requirements in E2 are entirely different from those of the method and installation according to the contested patent.

(f) *Appellant II*

Appellant II's arguments against inventive step all involved combining the teachings of the document A1, filed at the appeal stage with those of E4, E5 or E6.

Document A1 shows that it is entirely feasible to reverse the flow in line A of E4, line 6 of E5 and line 14 of E6 (equivalent of line A in E4) in order to cope with a change in operating conditions and thus arrive at the subject-matter of claim 1 without exercising an inventive step. By studying figures 5 and 6 of A1 it can be seen that there is a reversal of flow in line 800, which would give a direct indication to the skilled person that a reversal of flow in the conduits A and 14 of E4 and E6 respectively is possible.

The respondent accepted that figure 5 of A1 shows an embodiment wherein the feed air is compressed in compressors 902 and 903 and then after expansion in turboexpander 904 is recycled in line 133 to a point prior to compressor 900. However, the mention at column 6 lines 50-56 that in certain cases such recycle streams can be reversed so as to be passed to the high-pressure column, did not mean that the feed stream A,F of E4 could simply be reversed so as to form a recycle stream. Further, if in E4, the air of turbine 86 were passed to the compressor stage 76 then the outlet of turbine 88 would also have to be recycled, however, this is not a practical modification of the process shown in E4. The same arguments also apply to documents E5 and E6.

(g) *Reimbursement of appeal fee, Rule 67 EPC*

Essentially, appellant I argued, that Article 114(2) EPC, cited by the opposition division, is not applicable in this case as (i) the objection under Article 100(b) EPC is not late filed and (ii) a ground for opposition is neither a fact nor evidence. Further,

appellant I objected that the reasons for deciding not to admit the objection under Article 100(b) are absent from the impugned decision.

Reasons for the Decision

1. *Admissibility of new request*

The Board considers that the main request filed with letter of 4 October 2006 is admissible since the amendments to claim 1 were made in response to observations contained in the communication pursuant to Article 11(1) RPBA annexed to the summons to oral proceedings. The amendments carried out were intended to overcome a possible objection of lack of novelty with respect to E1. In particular, the amendments further define the cooling of the feed air and the vaporisation of the liquid oxygen effected by a heat exchange occurring within the main heat-exchanger. Accordingly claim 1 is restricted to the explicit disclosure of the patent. These amendments could not have come as a surprise to the appellants nor are they of a nature to have occasioned a restructuring of the appellants arguments to the extent that a postponement of the oral proceedings could be warranted.

2. *Article 84 EPC*

The Board cannot accept appellant I's objection concerning the ambiguity of the term "return streams". This expression forms part of the standard description used to designate all the streams returning from the

cryogenic air distillation columns to the main heat-exchanger.

3. *Article 123(2) EPC*

In the Board's view the feature of "reintroducing the turboexpanded second part into the main heat exchanger" in claim 1 of the main request does not contravene the requirements of Article 123(2) EPC. Claim 1 also specifies that the turboexpanded, and thereby cooled, second part is recycled to the feed air between the first and the nth compression stage after partial traverse of the main heat-exchanger. This being so, it is considered clear that the turboexpanded second part must be reintroduced into the main heat-exchanger so as to be warmed therein because further cooling, prior to its recycling to the interstage, would result in an even greater temperature difference and make no technical sense. Further, even if there were any doubt, a basis for this amendment can be found in the figures and at column 5, lines 49-52 of the A1 publication which reads "Resulting turboexpanded second part 68 is warmed by partial traverse of the main heat exchanger 17 and then recycled to the primary air compressor between the first and last stages".

The list of alleged obligatory restrictions mentioned by appellant I is inconsistent. According to figure 1 the whole of the second part is cooled (rather than warmed) after introduction into the main heat-exchanger and a part of the second part is then warmed after reintroduction into the main heat-exchanger following turboexpansion in turbine 18. There is no need to designate the second turbine as the "warm turbine"

since this was not done in the original claim and the turbine is adequately defined by its relation to the main heat-exchanger.

The Board also cannot accept the objection to the use of the term "return streams". It is clear from the process diagram of the contested patent that cooling of the feed air takes place at least partly, in the main-heat exchanger, where cooling is provided by the returning streams. The expression introduced into amended claim 1 is explicitly disclosed at column 5 lines 24-25 and lines 43-44 of the A1 publication.

The argument of appellant I concerning the broadening and shifting of the claimed subject-matter is also not convincing since claim 1 of the main request specifies that the heat exchange of the cooling feed air takes place with return streams in addition to vaporising LOX, whereas granted claim 1 only specified vaporising LOX.

4. *Article 100(b), Article 83 EPC*

The Board agrees with the respondent that the term "vaporise" cannot be limited to mean a single temperature where the phase change from liquid to vapour occurs, but must be understood as a collective term encompassing a broad range including heating the super-cooled liquid, the phase change itself and the consequent warming of the vapour. Indeed it must be remembered that a patent is drafted to be read by a technically skilled person seeking to understand its content, if appellant I's interpretation were accepted it would mean that the skilled person is locked in an overly pedantic straight-jacket preventing any

flexibility to arrive at a sensible technical evaluation of a claim's meaning within the context of the patent as a whole. The very fact that appellant I is making an objection under Article 100(b) EPC would seem to bear out this fact.

The Board understands that the alleged inefficiency of the process that would prevent the skilled person from being able to perform the invention as claimed, only arises if a narrow interpretation of the expression "vaporising" is taken. However, as explained above, this does not represent the Board's view of how the skilled person would understand the claim, hence, in these circumstances the objection is redundant.

Consequently, the contested patent gives the skilled person the necessary information to carry out the invention claimed as required by Article 83 EPC.

5. *Article 54 EPC, novelty*

(i) with respect to E4

Document E4 discloses a cryogenic air separation installation comprising two means for feeding air to the bottom of the high-pressure column. The first means passes feed-air from the second stage (78) of a primary air-compressor through the main heat-exchanger (6), a primary turboexpander (86) and a feed inlet (14) to the high-pressure column. The second means passes feed-air from the second stage (78) of the primary air-compressor through a booster-compressor (80), a secondary turboexpander (88) and the main heat-exchanger (6) to the same inlet (14). A further feed-

air stream is passed from the primary air-compressor upstream of its second stage through the main heat-exchanger (6) to inlet (14) through conduits (A,F).

In the Board's view the conduit A cannot be considered as "a means for passing air from the secondary turboexpander to the primary air compressor between the first and nth compression stage". It is clear from the flow diagram that the air in fact flows in the opposite sense and it is considered implicit that the conduit A would be fitted with the necessary control valves etc. to ensure flow in the direction indicated. Consequently, this would make conduit A unsuitable, without modification, as a means for passing air in the other direction.

(ii) with respect to E5

In the air-separation apparatus of E5 the means for passing feed air from the nth stage (44) of the primary air compressor to the main heat exchanger (11) also includes the booster compressors (46,48). Hence, air does not go directly from the primary air compressor to the main heat exchanger by this route. Air from the compressor which leaves after stage 2 via line 6 to the heat-exchanger can pass directly to a first turboexpander (52) via line 86. Alternatively, a small amount of air maybe bled off from the line between the turboexpanders (50) and (52) via line 86 to merge with air in line 6 leaving the first stage (2) of the primary compressor to be fed to the high-pressure column. Thus, air bled off through line 86 is not recycled to the compressor. Hence, since in both cases air is leaving the compressor via line 6, there are no

means for passing air from the secondary turboexpander (50) to the primary air compressor between the first and nth compression stage.

(iii) with respect to E6

This document is very similar to E4 except that the expansion valve 90 of E4 is replaced with a turbine and turbine 82 along with the associated stream B feeding air to the low-pressure column are deleted. The installation in this document differs from the subject-matter of claim 5 also in that although a conduit (14) is present, it does not constitute suitable means "for passing air from the secondary turboexpander to the primary air compressor between the first and nth compression stage" for the same reasons as given above for the conduit A of E4.

In conclusion, the subject-matter of claim 5 meets the requirements of Article 54 EPC.

The novelty of independent claim 1 has not been disputed by the appellants.

6. *Article 56 EPC, inventive step*

6.1 *Appellant I*

Document E1 discloses a cryogenic air separation method, which, as in E4, comprises two feed-air streams supplied to the bottom of the high-pressure column. A first part passes from the third stage (8) of a primary air-compressor through the main heat-exchanger (10), a primary turboexpander (16) and then to a feed inlet (24)

of the high-pressure column. A second part passes from the third stage (8) of the primary air-compressor through a booster compressor (18), a secondary turboexpander (20) and the main heat-exchanger (10) before entering the same inlet (24) to the high-pressure column. The process differs from that of E4 in that a portion of the second part is recycled through the main heat-exchanger and mixed with the feed-air upstream of the third stage.

The Board concurs with the respondent and appellant I that the subject-matter of claim 1 differs from the method according to E1 in that the second part of air is passed through the main heat-exchanger wherein it is cooled by indirect heat-exchange with return streams prior to turbo-expansion, reintroduction into the main heat-exchanger and recycling.

The consequence of this step is that, in contrast to the situation in E1, the exhausts from the turboexpanders are not combined nor does the secondary turboexpander feed directly into the high-pressure column. Consequently, the inlet temperature to the turbine is no longer fixed, but can be selected by varying the take-off point from the heat-exchanger.

The objective problem can therefore be seen as one of how to provide increased flexibility in operation of the plant.

The Board is in agreement with the appellant insofar as that, when a greater amount of cooling is required than can be provided by expansion of all the feed-air

entering the installation, it is a known solution to recycle some of the feed-air.

However, there is neither a suggestion in the available prior art nor is it obvious for the skilled person on the basis of his own knowledge, to pass the second part of the air into the main heat-exchanger **before** turboexpanding a part of it.

Appellant I's argument that when using a simulation programme in the standard manner it is usual to leave such parameters free such that heat-exchanger operation can be optimised within fixed boundary conditions is not convincing since it anticipates the solution proposed by the contested patent in assuming that the inlet temperature to the second turboexpander should be variable.

The Board is also of the opinion that the skilled person would find no incitement in E2 to modify the method according to E1 in order to obtain that of claim 1. E2 in particular does not disclose a recycle to a compressor interstage and does not relate to a product boiler arrangement, wherein liquid oxygen is withdrawn from the plant and then vapourised by indirect heat-exchange with the feed-air that is fed to the turboexpanders. Hence, the refrigeration requirements in E2 are entirely different from those of the method and installation according to the contested patent.

In conclusion the Board agrees with the respondent that the method according to claim 1 of the contested patent provides a way of optimising not only the operation of

the secondary turboexpander but also of efficiently dividing the refrigeration produced between the primary and secondary turboexpanders.

6.2 *Appellant II*

The Board does not accept appellant II's argument concerning the teaching of A1. Figures 5 and 6 of A1 only differ from each other in that some of the air leaving the turbine 904 is fed to the bottom of the high-pressure column as opposed to it all being recycled. In the Board's view this does not demonstrate a reversal of the flow in line 800 rather just a change in debit. Hence, document A1 cannot give a suggestion to the skilled person to reverse the flow in the conduits A and 14 of E4 and E6 respectively.

Thus, the subject-matter of claim 1 according to the main request also meets the requirements of Article 56 EPC.

The above reasoning applies equally to the subject-matter of the independent apparatus claim 5 as granted, since the distinguishing feature of the method claim 1 finds expression in the corresponding apparatus features.

7. *Reimbursement of appeal fee*

Although appellant I may have found the opposition division's interpretation of claim 1 as granted surprising, the Board considers it nevertheless justifiable on a narrow interpretation of the claim. It is evident, from the reference to the minutes in

point 3 of the reasons and from the further findings on inventive step, that the opposition division applied this interpretation in a consistent manner. Appellant I has admitted that such a process, albeit very inefficient, can be carried out. The respondent appears correct in pointing out that appellant I's arguments refer mainly to economic blocks against carrying out the invention rather than technical ones.

The requirements for the filing of oppositions are governed by Article 99 EPC and Rule 55 EPC taking into consideration the rulings made in G 10/91. Accordingly, the ground for opposition under Article 100(b) is certainly late filed, as the nine month requirement stipulated in Article 99 EPC was not met, albeit possibly in response to an unexpected interpretation of claim 1 by the opposition division.

In the board's opinion there can be no compulsion under Article 114(2) or (1) EPC (referred to in decision G 10/91), for an opposition division to provide any reasoning beyond an indication that it has examined the merits of a fresh ground of opposition and come to a conclusion. In this case an assertion that the fresh ground is not *prima facie* relevant is deemed a sufficient indication.

Given this situation, no substantial procedural error has occurred, hence reimbursement under Rule 67 EPC is not justified.

Order

For these reasons it is decided that:

1. The impugned decision is set aside.

2. The case is remitted to the department of first instance with the order to maintain the patent in amended form on the basis of the following documents:
 - claim 1 as filed with letter of 4 October 2006
claims 2-10 as granted;
 - description page 2 as filed with letter of
30 October 2006, pages 3-5 as granted;
 - figure 1-2 as granted.

Registrar:

Chairman:

A. Counillon

U. Krause

Case Number: T 0913/04 - 3.2.03

DECISION
of 9 August 2007 correcting an error in the decision
of the Technical Board of Appeal 3.2.03
of 7 November 2006

Appellant I: LINDE AKTIENGESELLSCHAFT
(Opponent) Abraham-Lincoln-Straße 21
D-65189 Wiesbaden (DE)

Representative: Imhof, Dietmar
Linde AG
Zentrale Patentabteilung
Dr.-Carl-von-Linde-Straße 6-14
D-82049 Höllriegelskreuth (DE)

Appellant II: L'AIR LIQUIDE S.A. A DIRECTOIRE ET CONSEIL DE
(Opponent) SURVEILLANCE POUR L'ETUDE ET L'EXPLOITATION
DES PROCEDES GEORGES CLAUDE
75 Quai d'Orsay
F-75321 Paris Cedex 07 (FR)

Representative: Le Moenner, Gabriel
L'AIR LIQUIDE S.A.,
Service Propriété Industrielle
75, quai d'Orsay
D-75321 Paris Cédex 07 (FR)

Respondent: PRAXAIR TECHNOLOGY, INC.
(Patent Proprietor) 39 Old Ridgebury Road
Danbury, CT 06810-5113 (US)

Representative: Schwan, Gerhard
Schwan Schwan Schorer
Patentanwälte
Bauerstraße 22
D-80796 München (DE)

Decision under appeal: Decision of the Opposition Division of the
European Patent Office posted 25 May 2004
rejecting the opposition filed against European
patent No. 0877217 pursuant to Article 102(2)
EPC.

Composition of the Board:

Chairman: U. Krause
Members: C. Donnelly
M. Vogel

In application of Rule 89 EPC the decision given on 7 November 2006 is hereby corrected as follows:

In the order on page 23, the description page 2 filed with letter of 30 October 2006 is replaced by the corrected description page 2 as filed with letter of 7 August 2007.

Registrar:

Chairman:

A. Counillon

U. Krause