THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 23

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte HOO Y. CHUNG, STANLEY B. MILLER, III,
DONALD R. MONSON and TIMOTHY J. WALSH

Appeal No. 95-0357
Application 07/854,236[1]

ON BRIEF

Before MEISTER, FRANKFORT, and McQUADE, Administrative Patent Judges.

MEISTER, Administrative Patent Judge.

DECISION ON APPEAL

[1] Application for patent filed March 20, 1992.

This is an appeal from the final rejection of claims 1-47, the only claims present in the application.[2]

The appellant's invention pertains to a process for treating a gas mixture (which includes both a sterilant gas and a diluent gas) wherein either the sterilant gas or the diluent gas is removed from the gas mixture. In order to achieve the separation of the sterilant gas or diluent gas from the gas mixture, the gas mixture is fed in a stream through one or more membrane separation units. The membranes are "perm-selective"[3] so as to allow preferential migration of either the sterilant gas or the diluent gas. In most instances, however, "membrane materials will allow at least some permeation by both components of the gas mixture" (see specification, page 15, lines 10-13). Independent claim 1 is further illustrative of the appealed subject matter and reads as follows:

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[2] Claims 1, 22 and 46 have been amended subsequent to final rejection.

[3] A perm-selective membrane is defined on page 15 of the specification as a membrane made of a material that "allows migration of the sterilant and diluent [gases] at different rates."

1. A process for treating a gas mixture including a sterilant gas and a diluent gas, said process comprising the steps of:

(a) feeding said gas mixture into a membrane separation unit to first separate said sterilant gas from said diluent gas prior to treatment or recovery of either, said membrane separation unit including a membrane which allows a preferential migration of a preferentially permeating gas selected from the group consisting of said diluent gas and said sterilant gas through said membrane, wherein said gas mixture comes into contact with said membrane within said membrane separation unit and said preferentially permeating gas is concentrated by the preferential passage of said preferentially permeating gas through the membrane; and

(b) withdrawing both a diluent-rich gas stream and a sterilant-rich gas stream out of the membrane separation unit.

The reference relied upon by the examiner as evidence of obviousness is:

Baker et al. (Baker)	5,069,686	Dec. 3, 1991

Claims 1 through 47 stand rejected under 35 U.S.C. § 103 as being unpatentable over Baker.

The examiner's rejection is explained on pages 3-5 of the answer. Rather than reiterate the arguments of the appellants and the examiner in support of their respective positions reference is made to the brief, reply brief, answer and supplemental answer for the full exposition thereof.

OPINION

Having carefully considered the scope of the claims on appeal, the teachings of the Baker reference and the respective viewpoints advanced in the brief, reply brief, answer and supplemental answer, we are of the opinion that the rejection of claims 1-45 and 47 under 35 U.S.C. § 103 based on the reference to Baker is sustainable. We will not, however, sustain the examiner's rejection of claim 46 under 35 U.S.C. § 103 based on this reference.

Considering first the rejection of claims 1-45 and 47 under 35 U.S.C. § 103 as being unpatentable over Baker, the appellants initially note that the gas mixture in Baker is subjected to a first treatment operation which "may be any process known in the art for sterilant removal, including absorption and reaction methods . . ." (column 2, lines 51-56 of Baker) and the residue gas stream from this first treatment operation (which is described by Baker as "essentially free of the sterilant, or will contain it in very low concentrations only" -- see column 2, lines 57-59) is then subjected to a second treatment operation

wherein it is passed through multiple membrane separation units. Thereafter, the appellants vigorously argue that just because Baker states that his first treatment operation for sterilant removal "may be any process known in the art for sterilant removal" does not mean that it would have been obvious to utilize the multiple membrane separation units of Baker's second operation for the first operation. The reply brief also states that

> the Examiner erred in concluding that the gas mixture fed by Baker et al. to the membrane separation step is a sterilant/diluent mixture. Second, just because silicone rubber is used by both Appellants and Baker et al. and that selective permeability can be used to preferentially select sterilant or diluent to obtain the separation of sterilant from diluent, it does not necessarily follow that Baker et al. teaches withdrawing sterilant from a sterilant/diluent mixture.
>
> To begin with, the same result obtained in two processes does not means [sic, mean] the processes are the same or that one is obvious over the other. It is Appellants' application, not Baker et al. that teaches the selective permeability of sterilant and diluent. Baker et al. only teach the selective permeability of diluent or other gases such as nitrogen or air, not sterilant. Furthermore, the Baker et al. process and Appellants' claimed process do not produce the same result. Baker et al. do not disclose or suggest obtaining a sterilant concentrate stream. [I]n the Baker et al. patent, there is no result that is the

> same as having a sterilant-concentrated stream and a diluent-concentrate stream. In Appellant's invention, withdrawing a sterilant or a diluent from a membrane separation step may produce similar results: producing a diluent-concentrate stream and a sterilant-concentrated stream, however, such is not the case with the Baker et al. process, since no sterilant concentrate stream is produced by Baker et al. [see pages 5 and 6; emphasis in original].

While we agree with the appellants that it would not have been obvious from the teachings of Baker, taken as a whole, to substitute in Baker for his first treatment operation (wherein the majority of sterilant gas is initially removed by means other than a membrane) the multiple membrane separation unit (see column 3, line 41) utilized by Baker in his second treatment operation (wherein the residue gas from the first operation is treated), we cannot agree that the examiner erred in concluding that the residue gas fed to the multiple membrane separation unit in Baker's second operation is a sterilant/diluent mixture as broadly claimed.

As to the question of whether it would have been obvious to substitute in Baker for his first treatment operation the multiple membrane separation unit utilized by Baker in his second

treatment operation, we observe that the mere fact that the prior art could be modified would not have made the modification obvious unless the prior art **suggested** the desirability of the modification. ***See In re Fritch***, 972 F.2d 1260, 1266, 23 USPQ2d 1780, 1783-84 (Fed. Cir. 1992) and ***In re Gordon,*** 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984). Here, Baker discloses that the first treatment operation wherein sterilant gas removal first takes place may be accomplished by absorption, catalytic oxidation, some other chemical reaction or "any process known in the art" for sterilant gas removal (see, generally, the abstract and column 2, lines 45-68), but makes no mention of membranes as an alternative that is known in the art for such sterilant gas removal. Even though the examiner is correct in his finding that the multiple membranes in Baker's second treatment operation do in fact separate a diluent gas from a gaseous stream that contains some sterilant gas (see, e.g., page 2 of the answer), we must point out that the gaseous stream treated by this second treatment operation is formed of a **residue** gas that remains after the first treatment operation (which Baker relies on to remove

the majority or most of the sterilant gas) and Baker's stated purpose of the second treatment operation is to remove diluent gas from this residue gas (see, generally, columns 7-11). Baker makes no express mention of the multiple membranes removing sterilant gas from the residue gas. This being the case, we are of the opinion that there is nothing in the teachings of Baker, taken as a whole, which would fairly suggest the **desirability** of using the multiple membranes of his second treatment operation as a sterilant gas removal means in his first treatment operation.

With respect to the appellants' argument that Baker does not teach the use of a membrane to separate a gas stream into a "sterilant concentrate stream" and a "diluent-concentrate stream," this argument is not commensurate with the scope of the claimed subject matter inasmuch as there is no claim limitation which requires either a sterilant-concentrate stream or a diluent-concentrate stream. Instead, independent claims 1 and 22 merely require the step of withdrawing a **sterilant-rich** gas stream and a **diluent-rich** gas stream from the membrane separation unit. Giving the term "rich" its ordinary and accustomed

meaning,[4] it is conceivable that a sterilant-rich gas stream might be considered to be one which has large or concentrated amounts of sterilant gas and a diluent-rich gas stream might be considered to be one which has large or concentrated amounts of diluent gas. We must point out, however, that it is well settled that words in a claim given their ordinary and accustomed meaning **unless** it appears from the specification that they were used differently by the inventor. ***See, e.g., In re Paulsen***, 30 F.3d 1475, 1480, 31 USPQ2d 1671, 1674 (Fed. Cir. 1994). Here, we believe that it is readily apparent from the appellants' specification that they intended the term "rich" to be used in a sense which is different than that of its ordinary and accustomed meaning.

Reviewing the appellants' specification it is stated therein under the "Description of the Prior Art" that sterilization processes are carried out in sterilizing chambers and utilize a

[4] The Random House Dictionary of the English Language, Second Edition-Unabridged, Random House Inc., New York, N.Y., 1987, defines "rich" as -- 16. abundant, plentiful, or ample: *a rich supply*. 17. *Auto*. (of a mixture in a fuel system) having a relatively high ratio of fuel to air (contrasted with *lean*) --.

sterilant gas which is explosive in nature and, in order to reduce the hazardous effects of the sterilant gas, a diluent gas is used to dilute the sterilant gas (see, generally, pages 1-5). The invention thereafter is stated to be directed to a process of treating a mixture of sterilant gas and diluent gas and the source of such a mixture of gases includes the exhaust gases from (1) chemical sterilization processes, (2) storage areas for sterilized equipment and (3) "any process or working area that utilizes chemical sterilants" (see specification, page 5). The process is further stated to be

> particularly useful as part of an industrial sterilization cycle. However, mixtures of sterilant and diluent, at least in **dilute concentrations**, must also be treated in the exhaust gases from storage areas used to store sterilized products, gases withdrawn from areas used to store or transfer sterilant gas mixtures, or any other work area where sterilant gas mixtures **or residues** may be present and the like. In a preferred embodiment, the present process is utilized to treat the exhaust gases from a chemical sterilization unit. Such sterilization is often carried out in a sealed chamber in which the articles to be treated are exposed to the sterilant/diluent gas mixture. When sterilization is complete, the chamber must be purged before it can be opened and the articles removed. Purging is typically carried out by **repeated cycles** of evacuation/flushing with air/evacuation. For example,

> the chamber may be pumped out by means of a vacuum pump down to a pressure of about 0.3 atmosphere. Air is then introduced and the resulting gas mixture is again evacuated. This process is **repeated up to 6 times or more**, until the chamber atmosphere is **essentially free of sterilant gas**. At this point, the chamber can be opened. Thus with each successive flushing, the exhaust gas contains **progressively lower concentrations** of sterilant and diluent and increased concentrations of air. Any or **all** of these gas mixtures may be subjected to the treatment process of the present invention [see specification, pages 13 and 14; emphasis ours].

It is readily apparent from the above that the claimed invention is directed to a process wherein the concentrations of the sterilant gas in the gas stream being treated may be extremely small, including those wherein the gas stream being treated is "essentially free" of sterilant gas.

Moreover, the specification on page 9 states that the diluent/sterilant gas mixture may be recirculated past a membrane surface area "until the mixture is sufficiently depleted of one component so that the remaining concentrated component may be recovered" (see lines 25-30). In a more detailed discussion of an embodiment wherein the diluent/sterilant gas mixture is recirculated or recycled (Fig. 5) the specification states:

> The sterilant/diluent gas mixture enters the first membrane separation unit (63) through line (79). The diluent-rich gas stream exits such unit through line (73). The sterilant-rich gas stream on the permeate side of the membrane exits the first membrane separation unit though line (71) and is fed to a catalytic oxidation system or ion exchange resin system (67). The products of such process leave the unit (67) through line (68). The diluent-rich gas stream, which contains **some sterilant** leaving the first membrane separation unit (63) through line (73) is fed to a second membrane separation unit (65). The sterilant-rich gas stream on the permeate side of the second membrane separation unit (65) leaves the unit through line (75) and is fed to a second catalytic oxidizer or ion exchange system (69). . . . The diluent-rich gas stream exiting the feed side of the second membrane separation unit (65) and line (77) is recycled back to the suction side of the pump (81) and re-fed to the first membrane separation unit (63) through line (79). In this way, the diluent-rich gas stream can be recycled through the membrane separation system **until the level of sterilant within the diluent-rich stream has been depleted sufficiently** [see the paragraph bridging pages 25 and 26; emphasis ours].

In other words, the gas mixture is described as being fed through a first separation unit 63 with what is termed a **diluent-rich** gas being removed through line 73 to a second membrane separation unit 65 wherein what is termed a "sterilant-rich" gas is removed from this **diluent-rich** gas. Moreover, the **diluent-rich** gas is described as being recycled back through the first and second

separation units a number of times with "sterilant-rich" gas being removed **each time** from the **diluent-rich** gas.

Considering the appellants' specification as a whole, it is apparent to us that the appellants have used the term "rich" in a broad **relative** sense rather than meaning something that is highly concentrated as the appellants appear to argue. That is, the appellants have used the sterilant-rich and diluent-rich gases in the broad sense that a sterilant-rich gas has more sterilant gas in it than a diluent-rich gas does and vice versa, **irrespective of the total concentration of one or the other gases.**

When viewed in this context, we are satisfied that independent claims 1 and 22 do not patentably distinguish over the arrangement of Baker wherein a sterilant/diluent gas stream 3 is fed to a first separation unit 1 where most of the sterilant gas is removed and the residue gas stream 5 exiting from separation unit 1 is passed through a second separation unit 2 which utilizes a membrane for separation (see, e.g., Fig. 1). As the appellants recognize, Baker states that the residue gas stream 5 will "normally be essentially free of the sterilant, or

will contain it in very low concentrations only" (see column 2, lines 57-59) and that the membrane may be "selectively permeable to the diluent" (see, column 2, line 64) for the purpose of removing a diluent-rich stream 6, with the "other" gases (which obviously would contain whatever sterilant gas, or at least most of the sterilant gas, that was contained in the residue stream 5) being removed in a gas stream 7. Thus, it is readily apparent that the residue stream 5 of Baker has sterilant gas in it, albeit at "very low concentrations." Accordingly, the gas stream 7 of Baker may be considered to be "sterilant-rich" relative to his diluent-rich gas stream 6 inasmuch as it has more sterilant gas in it than the diluent-rich stream. Giving the terms "diluent-rich" and "sterilant-rich" in independent claims 1 and 22 their broadest reasonable interpretation,[5] we find response in Baker for the step of withdrawing both a diluent-rich (i.e., stream 6) and a sterilant-rich (i.e., stream 7) gas stream out of the membrane separation unit.

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[5] ***See In re Zletz***, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989).

> It is also the appellants' contention that they
>
> amended [the] claims to recite that the membrane separation unit is to be used to "first separate said sterilant gas from said diluent gas prior to treatment or recovery of either" of the gases. The use of the term "comprising" in the claims pending then would only be open-ended in regards to the treatment steps subsequent to the first membrane separation step [see brief, page 19; emphasis in original].

This argument is totally without merit. By using the term "comprising" in the claims the appellants have not excluded **any** method steps not recited in the claims. ***See, e.g., In re Baxter***, 656 F.2d 679, 686, 210 USPQ 795, 802 (CCPA 1981) and ***Moleculon Research Corp. v. CBS, Inc.***, 793 F.2d 1261, 1271, 229 USPQ 805, 812 (Fed. Cir. 1986), ***cert. denied***, 479 U.S. 1030 (1987). Thus, in Baker the broad step of feeding a gas mixture to a membrane separation unit to "first separate . . ." may be considered to be the feeding of the residue gas stream 5 to separation unit 2 wherein the "sterilant-rich" gas stream 7 is separated from the diluent-rich stream 6 prior to the time the diluent-rich stream is "liquefied, recycled, or sent for processing" (see column 6, lines 14 and 15).

With respect to independent claim 22, the appellants additionally argue that it would not have been obvious from Baker's teachings to use a membrane that selectively allows greater migration of the sterilant gas through the membrane. We are unpersuaded by such an argument. As we have noted above, the "other" gases being removed in the gas stream 7 of Baker would obviously contain at least most of the sterilant gas that was present in the residue stream 5. As we also have noted above, Baker in column 2, line 64, states that his membrane in the second separation unit 2 may be selectively permeable to the diluent gas. However Baker, as an alternative, also indicates that the membrane may be selectively permeable to the "other" gases (see column 2, lines 67 and 68) or "impermeable to the diluent" gas (see column 9, lines 13 and 14). Since these "other" gases contain sterilant gas, Baker's alternative can be considered to selectively allow greater migration of the sterilant gas through the membrane as broadly claimed.

The appellants have not separately argued the patentability of dependent claims 2-21, 23-45 and 47. Accordingly, these

claims fall with the claims from which they depend. ***See In re Nielson***, 816 F.2d 1567, 1572, 2 USPQ2d 1525, 1528 (Fed. Cir. 1987) and ***In re Schrader***, 22 F.3d 290, 292 n.3, 30 USPQ2d 1455, 1456 n.3 (Fed. Cir. 1994).

In view of the foregoing, we will sustain the examiner's rejection of claims 1-45 and 47 under 35 U.S.C. § 103 based on the reference to Baker.

We turn now to the rejection of claim 46 under 35 U.S.C. § 103 as being unpatentable over Baker. As we have stated above with respect to the rejection of claims 1-45 and 47 under 35 U.S.C. § 103, we are not of the opinion that it would have been obvious to substitute in Baker for his first treatment operation (wherein the majority of the sterilant gas is initially removed by means other than a membrane) the multiple membrane separation unit utilized by Baker in his second treatment operation (wherein the residue gas from the first operation is treated). As to the question of whether the recitation of "consisting essentially of" in the preamble of claim 46 excludes the arrangement of Baker wherein a majority of sterilant gas is

initially removed by means other than a membrane, this Board in ***Ex parte Hoffman,*** 12 USPQ2d 1061, 1063-64 (Bd. Pat. App. & Int. 1989) stated:

> we consider the language "consisting essentially of," when used as a modifier of method steps, to render the claim open only for the inclusion of steps **which do not materially affect** the basic and novel characteristics of the claimed method. To determine the steps included versus excluded by this language, the claim must be read in light of the specification [citations omitted; emphasis ours].

Here, when read in light of the specification, we are of the opinion that the basic and novel characteristics of the claimed method (wherein a membrane is used as the **only** means to remove the sterilant gas) is indeed materially affected by Baker's first separation step. This being the case, we are of the opinion that Baker's arrangement is excluded by the recitation "consisting essentially of." Accordingly, we will not sustain the examiner's rejection of claim 46 under 35 U.S.C. § 103 based on the reference to Baker.

In summary:

The examiner's rejection of claims 1-45 and 47 under 35 U.S.C. § 103 is affirmed.

The examiner's rejection of claim 46 under 35 U.S.C. § 103 is reversed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED-IN-PART

JAMES M. MEISTER)
Administrative Patent Judge)
)
) BOARD OF PATENT
) APPEALS AND
CHARLES E. FRANKFORT) INTERFERENCES
Administrative Patent Judge)

McQUADE, Administrative Patent Judge, dissenting:

The examiner's decision to reject claims 1 through 47 under 35 U.S.C. § 103 as being unpatentable over Baker should be reversed in its entirety.

Claims 1, 22 and 46, the three independent claims on appeal, recite with varying degrees of specificity a process for treating, or separating the components of, a gas mixture containing a sterilant gas and a diluent gas. In general, the claimed process requires, inter alia, the steps of feeding the gas mixture into a membrane separation unit and withdrawing both a diluent-rich gas stream and a sterilant-rich gas stream out of the unit. Baker neither teaches nor would have suggested a process having such steps.

Baker discloses a process for treating gas mixtures containing a sterilant gas, a diluent gas and air or other gases. As described by Baker,

> [t]he process of the invention includes two separation operations. In the first operation, waste gas containing sterilant and inert diluent is subjected to a treatment to remove the sterilant. The waste gas thus treated may be off-gas from the sterilizer, effluent gas from quarantine chambers, work, storage or transfer areas, or any other situation where such a gas mixture arises. The first treatment operation may be any process known in the art for sterilant removal, including absorption and reaction methods, such as aqueous scrubbing, catalytic oxidation, exposure to solid or liquid reagents or adsorption onto activated carbon. The residue gas stream from the first treatment operation will normally be essentially free of the sterilant, or will contain it in very low concentrations only. The residue gas stream is then passed to a second treatment operation to remove the diluent. This operation comprises a membrane separation process. The process may involve running the gas stream containing the inert diluent across a membrane that is selectively permeable to the diluent. The diluent is concentrated in the stream permeating the membrane; the residue non-permeating stream is depleted in diluent. Alternatively, the membrane may be selective for air or other components in the gas over the diluent [column 2, lines 45 through 68].

I share the majority's view that Baker would not have suggested using a membrane separation unit to perform the first, sterilant removal operation of the foregoing method. I also concur with the majority's finding that the residue gas stream which is passed on to the second, diluent removal operation involving the membrane separation process may contain some

sterilant gas. I do not agree, however, with the majority's conclusion that this membrane separation process produces a "sterilant-rich gas stream" as this term, properly construed in light of the underlying specification, is used in claims 1, 22 and 46.

During patent examination, claims are to be given their broadest reasonable interpretation consistent with the specification without reading limitations from the specification into the claims. In re Zletz, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989); In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-51 (CCPA 1969). When interpreting claims, the words therein are generally given their ordinary and accustomed meaning unless it appears from the specification that they were used differently by the inventor. In re Paulsen, 30 F.3d 1475, 1480, 31 USPQ2d 1671, 1674 (Fed. Cir. 1994). Where an inventor chooses to be his or her own lexicographer and to give terms uncommon meanings, this must be done with reasonable clarity, deliberateness and precision within the specification to give one of ordinary skill in the art due notice of the change. Id.

In the present case, there is nothing in the appellants' specification that would lead one of ordinary skill in the art to conclude that the term "sterilant-rich gas stream" as used in the claims should have anything other than its ordinary and accustomed meaning. Using the dictionary definition of the word "rich" supplied by the majority (see note 4, supra), this term, properly construed, refers to a gas stream containing abundant, plentiful or ample amounts of sterilant, or having a relatively high ratio of sterilant to the rest of the gas in the stream. Such definition is completely consistent with the appellants' specification which indicates that the purpose of the gas mixture treatment process disclosed and claimed is to separate the sterilant and diluent components from the mixture to the extent necessary to prevent hazards to workers and the environment and/or to allow recovery and re-use of these components (see, for example, pages 2, 3, 17 and 18, 20 and 21). Because the separation membranes used in the process do not have perfect selectivity, gas mixtures may be passed through multiple membrane separation units "until the desired purification of each

constituent is accomplished" (page 18) or "until adequate permeation of one constituent has been accomplished based on the depletion of that constituent from the recycled feed" (page 18).

The residue gas stream from Baker's first treatment operation, which passes to the second, diluent removal operation using the membrane separation process, is essentially free of sterilant gas, or contains it in very low concentrations only. The membrane separation process produces a membrane-permeating stream in which diluent is concentrated and a non-permeating stream which is depleted in diluent. Given that the residue gas stream entering the membrane separation process is essentially free of sterilant gas or contains it in very low concentrations only, neither of the gas streams withdrawn from Baker's membrane separation unit can reasonably be considered to be "sterilant-rich" under the ordinary and accustomed meaning of this term, a point which seems to be conceded by the majority (see pages 8 and 9, supra).

According to the majority, however, "it is readily apparent from the appellants' specification that they intended the term

'rich' to be used in a sense which is different than that of its ordinary and accustomed meaning" (page 9, supra), to wit: "that a sterilant-rich gas has more sterilant gas in it than a diluent-rich gas does and vice versa, **irrespective of the total concentration of one or the other gases**" (page 13, supra, emphasis in the original). Not only is this definition not set out within the specification with the reasonable clarity, deliberateness and precision demanded by law (see In re Paulsen, supra), it is actually inconsistent with the appellants' description of their invention. For example and with reference to the appellants' Figure 5 embodiment which is proffered by the majority to support their position (see pages 11 through 13, supra), the "diluent-rich" gas stream exiting the first membrane separation unit 63 in line 73 and entering the second membrane separation unit 65 necessarily has at least as much, if not more, sterilant gas in it than does the "sterilant-rich" gas stream exiting the second membrane unit in line 75. Indeed, given the appellants' disclosure of the many factors that affect the separation process, it cannot even be said that the "sterilant-

rich" gas stream exiting the second membrane separation unit in line 75 necessarily has more sterilant gas in it than does the "diluent-rich" gas stream exiting the second membrane separation in line 77.

The majority's proposed definition of the term "sterilant-rich" is also inconsistent with the discussion in the appellants' specification of the Baker reference. For example, the comparison between the appellants' sterilant/diluent separation process and that disclosed by Baker which appears in the paragraph bridging pages 19 and 20 in the appellants' specification belies any conclusion that the appellants' claimed process encompasses the treatment of a gas mixture, such as Baker's residue gas, which has already had its sterilant component effectively removed.

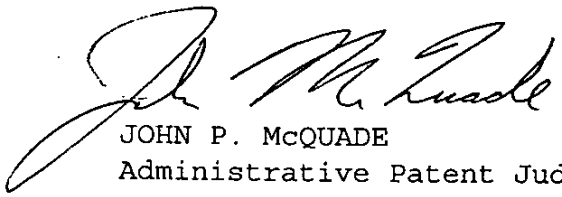
In the same vein, the passage from pages 13 and 14 of the appellants' specification which my colleagues have reproduced above (see pages 10 and 11, supra) does not support their proposition that the claimed invention encompasses a process for treating gas streams which are "essentially free" (the same words

used by Baker to describe his residue gas stream) of sterilant gas. To the contrary, this passage actually indicates that the appellants' invention does not encompass the treatment of gas streams which are "essentially free" of sterilant gas.

Finally, the majority's finding that Baker's diluent-depleted gas stream 7 has more sterilant gas in it than does the diluent-concentrated gas stream 6 (see page 14, supra) is completely speculative and has no factual basis in the Baker disclosure. Thus, their accompanying conclusion that "the gas stream 7 of Baker may be considered to be 'sterilant-rich' relative to his diluent-rich gas stream 6" (page 14, supra) is unsound, even if their proposed definitions of the terms "sterilant-rich" and "diluent-rich" are assumed for the sake of argument to be correct.

In summary, there is no basis whatsoever in the appellants' specification for majority's construction of the appealed claims. Properly interpreted in light of the underlying specification, all of the appealed claims define subject matter which patentably

distinguishes, within the meaning of 35 U.S.C. § 103, over the teachings of Baker.



JOHN P. McQUADE
Administrative Patent Judge

) BOARD OF PATENT
) APPEALS AND
) INTERFERENCES
)

Appeal No. 95-0357
Application 07/854,236

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