

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 41 (90/003,346)

Paper No. 31 (90/003,873)

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte PETROLITE CORP.

Appeal No. 97-2787
Reexamination Nos. 90/003,346¹
and 90/003,873²

HEARD: August 5, 1997

Before WILLIAM F. SMITH, PAK and WALTZ, Administrative Patent Judges.

¹ Merged reexamination proceeding for U.S. Patent No. 5,074,991, issued December 24, 1991, to Jerry J. Weers, and based on Application No. 07/525,796, filed May 18, 1990, which appellant states is a continuation-in-part of Application No. 07/310,420, filed February 13, 1989, now abandoned. Reexamination request filed February 28, 1994.

² Merged reexamination proceeding for U.S. Patent No. 5,074,991, issued December 24, 1991, to Jerry J. Weers, and based on Application No. 07/525,796, filed May 18, 1990, which appellant states is a continuation-in-part of Application No. 07/310,420, filed February 13, 1989, now abandoned. Reexamination request filed June 23, 1995.

Appeal No. 97-2787

Reexamination Nos. 90/003,346 and 90/003,873

PAK, Administrative Patent Judge.

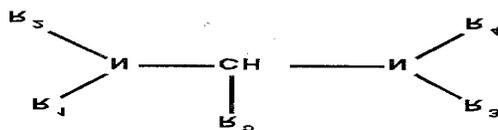
Appeal No. 97-2787
Reexamination Nos. 90/003,346 and 90/003,873

DECISION ON APPEAL

This appeal is taken under 35 U.S.C. § 306 from the final rejection of claims 1 through 9, 17 through 25, 35 and 42 through 46 in this merged reexamination proceeding involving U.S. Patent No. 5,074,991.³ Claims 10 through 16, 26 through 34, 36 through 41 and 47 through 50 have been allowed.

Claims 1, 17 and 42 are representative of the subject matter on appeal and read as follows:

1. A process of inhibiting the liberation of hydrogen sulfide gas from a material comprising water or a hydrocarbon containing dissolved hydrogen sulfide comprising adding to said material a sufficient amount of the following diaminomethane compound to inhibit gas evolution:



compound to
hydrogen sulfide

wherein R_1 , R_2 , R_3 , and R_4 are independently an alkyl radical containing one to 14 carbon atoms, $(CH_2)_n-OR_6$ or cycloalkyl having 5 or 6 carbon atoms or wherein R_1 and R_2 and/or R_3 and R_4 are alkylene groups joined together with their adjacent N to form a heterocyclic ring and wherein R_5 is hydrogen or methyl and R_6 is an alkyl having 1 to 5 carbon atoms and n is an

³ The final rejection of claim 36 has been withdrawn by the examiner. See Answer, page 2.

Appeal No. 97-2787

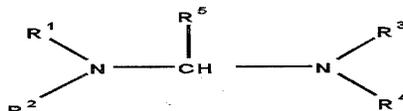
Reexamination Nos. 90/003,346 and 90/003,873

integer of 1 to 5.

17. A composition comprising:

a. a material comprising water or a hydrocarbon, and

b. a sufficient amount of the following diaminomethane compound to inhibit hydrogen sulfide gas liberation:

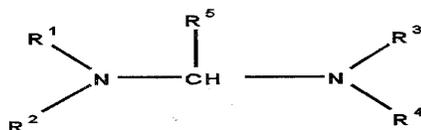


wherein R_1 , R_2 , R_3 , and R_4 are independently an alkyl moiety containing one 1 to 14 carbons atoms. [sic, ", "] $(CH_2)_n-OR_6$ or cycloalkyl having 5 or 6 carbon atoms or wherein R_1 and R_2 and/or R_3 and R_4 are alkylene groups joined together with their adjacent N to form a heterocyclic ring and wherein R_5 is hydrogen of [sic, or] methyl and R_6 is alkyl having 1 to 5 carbon atoms and n is an integer of 1 to 5.

42. A composition comprising:

a. a liquid hydrocarbon material, and

b. a sufficient amount of the following diaminomethane compound to inhibit hydrogen sulfide gas liberation:



wherein R_1 , R_2 , R_3 , and R_4 are independently an alkyl moiety containing one 1 to 14 carbons atoms, $(CH_2)_n-OR_6$ or cycloalkyl having 5 or 6 carbon atoms or wherein R_1 and R_2 and/or R_3 and R_4 are alkylene groups joined together with their adjacent N to form a heterocyclic ring and R_5 is hydrogen or methyl and R_6 is alkyl having 1 to 5 carbon atoms and n is an integer of 1 to

Appeal No. 97-2787

Reexamination Nos. 90/003,346 and 90/003,873

5.

Appeal No. 97-2787
Reexamination Nos. 90/003,346 and 90/003,873

The references of record relied upon by the examiner are:

Chamot	2,984,550	May 16, 1961
Kaspaul	4,244,703	Jan. 13, 1981
Doerges et al.(Doerges)	4,368,059	Jan. 11, 1983

The appealed claims stand rejected as follows:

(1) Claims 1 through 9, 17 through 22 and 42 through 46 under 35 U.S.C. § 103 as unpatentable over the disclosure of Doerges;

(2) Claims 17 through 25, 35 and 42 through 46 under 35 U.S.C. § 102 (b) as anticipated by, or in the alternative under 35 U.S.C. § 103 as obvious, over the disclosure of Chamot⁴; and

(3) Claims 17 through 22, 35 and 42 through 46 under 35 U.S.C. § 103 as unpatentable over the disclosure of Kaspaul.

At the outset, we note at page 10 of the Brief that appellant (patent owner) has grouped the claims as follows:

⁴ In the Answer (see the '346 Reexamination, Paper No. 38, pages 2 and 3), the examiner repeated the same rejections in the final office Action except they were not extended to claims 36 and 42 through 46. Although the examiner explicitly withdrew the § 102 and § 103 rejections of claim 36 over the Chamot reference, she never stated whether the § 102 and § 103 rejections of claims 42 through 46 over the Chamot reference were withdrawn. Id. To avoid piecemeal prosecution, we will presume that such rejections have not been withdrawn.

Appeal No. 97-2787

Reexamination Nos. 90/003,346 and 90/003,873

Group (1) - claims 1 and 3;

Group (2) - claims 2 and 4;

Group (3) - claims 7 and 8;

Group (4) - claim 5;

Group (5) - claims 6 and 9;

Group (6) - claims 17 through 20, 23, 24, 35 and 42;

Group (7) - claims 21, 22, 25 and 43 through 45; and

Group (8) - claim 46.

Accordingly, all the appealed claims in each group will stand or fall with the broadest claim therein. See 37 CFR § 1.192 (c)(5) and (c)(6) (1993); Ex parte Schier, 21 USPQ2d 1016, 1019 (Bd. Pat. App. & Int. 1991).

PROSECUTION HISTORY

The '991 patent was granted to Mr. Weers of Petrolite Corporation on December 24, 1991. See the Title Report, Paper No. 2 of Reexamination Control Nos. 90/003,346 and 90/003873. The '991 patent was issued from Application 07/525,796 filed on May 18, 1990. See the front page of the '991 Patent. According to the patentee, this Application is a continuation-in-part of abandoned Application 07/310,420 filed on February 13, 1989. See column 1, lines 7-10 of the '991 patent. The

Appeal No. 97-2787

Reexamination Nos. 90/003,346 and 90/003,873

'991 patent contained thirty-six claims, some of which were directed to a process for inhibiting the liberation of hydrogen sulfide gas from a material comprising water or a hydrocarbon containing dissolved hydrogen sulfide by adding thereto a particular amount of the diaminomethane compound defined by the claimed formula. See columns 7-10 of the '991 patent, including claims 1 through 16. The remaining claims were generally directed to a composition comprising a material comprising water or a hydrocarbon, and a particular amount of the diaminomethane compound defined by the claimed formula. See original claims 17 through 36 of the '991 patent.

A request for reexamination, Control No. 90/003,346, was filed on February 28, 1994 by a third party requester (Baker Hughes) based on the Doerges reference. See Statement in Support of Request for Reexamination, Paper No. 1. The examiner granted the request because she determined that a substantial new question of patentability was raised by the Doerges reference. See Order Granting/Denying Request for Reexamination, Paper No. 5. The '346 reexamination followed.

Appeal No. 97-2787

Reexamination Nos. 90/003,346 and 90/003,873

The examiner initially rejected claims 1 through 36, all the claims in the '991 patent, under 35 U.S.C. § 103 as unpatentable over the Doerges reference. See the first Office Action in the '346 Reexamination, Paper No. 6. In response, appellant submitted an amendment which included amended claims 2 and 13 and new claims 37 through 46. See Response to Office Action, Paper No. 7. In view of the amendment, the examiner withdrew the rejection of claims 10 through 16, 26 through 32, 34 and 36. See the second Office Action in the '346 Reexamination, Paper No. 8. According to the examiner, the Doerges reference failed to teach or suggest the claimed diaminomethanes containing heterocyclic groups or the claimed petroleum residue. Id. The examiner, however, maintained the rejection of claims 1 through 9, 17 through 33 and 35 over the Doerges reference. Moreover, the examiner rejected claims 1 through 46 under the judicially created doctrine of obviousness-type double patenting based on claims 1 through 22 of U.S. Patent No. 4,978,366 assigned to Petrolite Corporation. Id. At the same time, the examiner refused entry of new claims 37 through 46 because they were improperly written (i.e., without the

Appeal No. 97-2787
Reexamination Nos. 90/003,346 and 90/003,873

underlining as required

by 37 CFR § 1.121(f)). Id.

Following the examiner's Office Action, appellant had an interview with the examiner to discuss the examiner's interpretation of, inter alia, the claimed hydrocarbon. See Examiner Interview Summary Record, Paper No. 10 A, B and C. Appellant then submitted the second amendment. See Response to Office Action, Paper No. 11B. It introduced new claims 37 through 46 consistent with 37 CFR § 1.121(f) and provided arguments directed to, inter alia, the examiner's interpretation of the claimed hydrocarbon and obviousness-type double patenting rejection. Id.

After reviewing the second amendment, the examiner withdrew the obviousness-type double patenting rejection and allowed claims 10 through 16, 26 through 32⁵ and 36. See the third Office Action in Reexamination, Paper No. 13. These allowed claims, however, were objected to for depending on a rejected base claim and were required to be rewritten in independent form. Id. Moreover, the examiner allowed process

⁵ The examiner indicated that claim 33 was also allowable but rejected it under 35 U.S.C. § 103 as unpatentable over the Doerges reference.

Appeal No. 97-2787
Reexamination Nos. 90/003,346 and 90/003,873

claims 37 through 41 because they are directed to liquid hydrocarbons, rather than gaseous hydrocarbons. Id. The examiner, however, maintained the rejection of claims 1 through 9, 17 through 25, 33 and 34 over the Doerges reference and newly rejected claims 17 through 25 and 42 through 46 under 35 U.S.C. § 103 as unpatentable over the Kaspaul reference. Id. Appellant requested reconsideration of the examiner's rejections. See Response to Office Action, Paper No. 15. The examiner maintained her previous position and made the rejections final. See the fourth Office Action in Reexamination, Paper No. 17. Appellant appealed the decision of the examiner to the Board of Patent Appeals & Interferences (Board). See Notice of Appeal, Paper No. 18 and Appeal Brief, Paper No. 19.

In the meantime, a second request for reexamination, Control No. 90/003,873, was filed on June 23, 1995 by another third party requester (Nalco Chemical Co.) based on the Chamot and the Weers et al.⁶ references. See Statement in Support of Request for Reexamination, Paper No. 1. The examiner

⁶U.S. Patent No. 4,900,427 was issued to Weers et al. on February 13, 1990.

Appeal No. 97-2787
Reexamination Nos. 90/003,346 and 90/003,873

determined that the Chamot and Weers et al. references also raised a substantial new question of patentability. See Order Granting/Denying Request for Reexamination, Paper No. 5. Subsequent to the granting of the '873 reexamination, it was merged with the earlier requested '346 reexamination under 37 CFR § 1.156 (c). See the '346 reexamination, Decision Merging Reexamination Proceeding, Paper No. 8 and the '873 reexamination, Decision Merging Reexamination Proceeding, Paper No. 20. By merging, all papers issued by the U.S. Patent & Trademark Office and filed by the patentee will take the form of a single action which applies to both proceedings. Id. In addition, the same claims and specification were to be maintained in both proceedings. Id.

Upon conforming the claims of the '873 reexamination proceeding with those of the '346 reexamination proceeding, the examiner withdrew the finality of the rejections and objections in the '346 proceeding and presented new rejections for the merged proceedings. See, e.g., the '346 reexamination, the fifth office Action in Reexamination, Paper No. 21. Appellant responded to the rejections by not only arguing the merits of the rejections, but also adding new

Appeal No. 97-2787
Reexamination Nos. 90/003,346 and 90/003,873

claims 47 through 50. See, e.g., the '346 reexamination, Amendment D, Paper No. 25.

The examiner replied by repeating and then extending the same rejections to additional claims, including the new claims. See, e.g., the '346 reexamination, the sixth Office Action in Reexamination, Paper No. 27. The examiner, however, determined that claims 10 through 16 and 26 through 32 were still patentable over the prior art cited. Id.

Upon a further response by appellant (the '346 reexamination, Remark, Paper No. 28), the examiner made the rejections final. See the '346 Reexamination, the seventh Office Action in Reexamination, Paper No. 30. In this final Office Action, the examiner withdrew some of the rejections, while maintaining the others. Id. However, due to certain discrepancies, the examiner further clarified the rejections previously made final in her new final Office Action. See the '346 Reexamination, the eighth Office Action in Reexamination, Paper No. 32.

The examiner withdrew all the rejections based on the Weers et al. reference, but withdrew only the rejections of the process claims based on the Chamot reference. Id.

Appeal No. 97-2787

Reexamination Nos. 90/003,346 and 90/003,873

According to the examiner, the Weers et al. and the Chamot references do not describe, nor would have suggested, a hydrocarbon containing dissolved hydrogen sulfide. Id. The examiner also took the position that the Weers et al. reference is not "prior art" within the meaning of § 102. Id. Moreover, the examiner withdrew all of the rejections directed to process claims 33, 34 and 47 through 50. Id.; and the '346 Reexamination, Interview Summary Form, Paper No. 34. The examiner, however, has not withdrawn the rejections of certain process and/or product claims based on either the Doerges, the Chamot or the Kaspaul reference. See the '346 Reexamination, the eighth office Action in Reexamination, Paper No. 32, and Reexamination Interview Summary Form, Paper No. 34. This appeal ensued.

DISCUSSION

Having carefully studied the entire record, including all of the arguments advanced by both the examiner and appellant in support of their respective positions, we determine that only the § 103 rejection of claims 1 through 9 and 17 through 22 over the Doerges reference and the § 103 rejection of claims 17 through 22, 35 and 42 through 45 over the Kaspaul

Appeal No. 97-2787
Reexamination Nos. 90/003,346 and 90/003,873

reference are well-founded. Accordingly, we affirm the examiner's decision rejecting claims 1 through 9 and 17 through 22 under 35 U.S.C.

§ 103 over the Doerges reference and claims 17 through 22, 35 and 42 through 45 under 35 U.S.C. § 103 over the Kaspaul reference. However, we reverse the examiner's decision rejecting claims 42 through 46 under 35 U.S.C. § 103 over the Doerges references, claim 46 under 35 U.S.C. § 103 over the Kaspaul reference and claims 17 through 25, 35 and 42 through 46 under 35 U.S.C. § 102 or § 103 over the Chamot reference. Our reasoning for these determinations follows.

THE CLAIMED SUBJECT MATTER

The initial inquiry into the propriety of the examiner's rejections is the determination of the scope of claims. Gechter v. Davidson, 116 F.3d 1454, 1457, 43 USPQ2d 1030, 1032 (Fed. Cir. 1997). That determination necessarily requires interpretation of words in the claims. In construing the meaning of words in the claims, we must be mindful that "the mode of claim interpretation" applicable during prosecution or examination of original applications for patents before the

Appeal No. 97-2787
Reexamination Nos. 90/003,346 and 90/003,873

Patent and Trademark Office is different from that used by courts in litigation in connection with determinations of infringement or validity. In re Zletz, 893 F.2d 319, 321, 13 USPQ2d 1320, 1321-22 (Fed. Cir. 1989).

During prosecution or examination of original applications for patents, the pending claims must be interpreted as broadly as their terms reasonably allow consistent with the supporting specification. Zletz, 893 F.2d at 321, 13 USPQ2d at 1322; see also In re Paulsen, 30 F.3d 1475, 1479, 31 USPQ2d 1671, 1674 (Fed. Cir. 1994). This mode of interpreting claims in the course of prosecution or examination of original applications for patents is also applicable to reexamination proceedings. In re Etter, 756 F.2d 852, 858, 225 USPQ 1, 5 (Fed. Cir. 1985) ("claims subject to reexamination will be given their broadest reasonable interpretation consistent with the specification, and limitations appearing in the specification are not to be read in the claims"); In re Yamamoto, 740 F.2d 1569, 1571, 222 USPQ 934, 936 (Fed. Cir. 1984)(in a reexamination proceeding, claims must "be given their broadest reasonable interpretation consistent with the specification"). Applying this mode of

Appeal No. 97-2787
Reexamination Nos. 90/003,346 and 90/003,873

interpretation, we will determine the scope of the claims on appeal.

The claimed subject matter is primarily drawn to two different embodiments. The first embodiment recited in claims 1 through 9 is directed to a process for inhibiting the liberation of hydrogen sulfide gas from a material **comprising** water or a hydrocarbon containing dissolved hydrogen sulfide (emphasis added). The process **comprises** adding to the material a sufficient amount of the particular diaminomethane compound defined by the claimed formula to inhibit hydrogen sulfide gas evolution (emphasis added). See claim 1.

In accordance with appellant's (the patent owner's) suggestion at pages 2 and 3 of the Reply Brief, we interpret process claims 1 through 9 as requiring some suppression of hydrogen sulfide from a material comprising water or hydrocarbon containing dissolved hydrogen sulfide. We arrive at this interpretation due to the phrases "inhibiting the liberation of hydrogen sulfide gas from a material" and "inhibit hydrogen sulfide gas evolution" recited in the claims. This reading is consistent with appellant's specification which states at column 2, lines 24-36, that the

Appeal No. 97-2787
Reexamination Nos. 90/003,346 and 90/003,873

suppression or inhibition of the generation of hydrogen sulfide gases occurs upon adding the claimed diamine compound in "an amount sufficient to inhibit hydrogen sulfide gas evolution." See also claim 1.

Although the claims require some suppression or inhibition of the generation of hydrogen sulfide gases, they do not preclude the removal of hydrogen sulfide gases and/or treated hydrocarbons. Nor do the claims preclude the addition or the presence of other ingredients which are not recited. The term "comprising" used in the claims permits inclusion of steps, elements, components and/or functions, which are not claimed.

In re Baxter, 656 F.2d 679, 686, 210 USPQ 795, 802 (CCPA 1981). This interpretation is **consistent** with appellant's own specification which states in relevant part (column 1, lines 15-16, 19-23 and 39-44):

In particular, the invention relates to such removal or suppression by chemical means . . .

. . .
In the drilling, production, transport, storage, and processing of crude oil, including waste water associated with crude oil production, and in the storage of residual fuel oil, hydrogen sulfide, which is a very toxic substance, is often

Appeal No. 97-2787

Reexamination Nos. 90/003,346 and 90/003,873

encountered. . . .

In accordance with the present invention, hydrocarbon liquids, containing hydrogen sulfide, as well as hydrocarbon gases, such as natural gas of off gases from the production, transport, storage, and refining of crude oil can be controlled in a convenient and economical manner.

We also interpret the phrase "a hydrocarbon containing dissolved hydrogen sulfide" as including "gaseous or liquid hydrocarbon containing hydrogen sulfide" as held by the examiner. We observe that the term "a hydrocarbon" recited in the claims includes both liquid and gaseous hydrocarbons, since it does not specify whether "a hydrocarbon" is in the form of liquid or gas. As noted by appellant at page 23 of the Brief, the claims use the phrase "dissolved hydrogen sulfide" which modifies "a hydrocarbon", thus indicating that the hydrocarbon is in "the state of solution". However, we agree with the examiner that the term "solution" does not limit the claimed hydrocarbon to a liquid hydrocarbon. Rather, the term includes hydrocarbons in a gaseous form since its definition embraces both gases, solids and liquids. See, e.g., the *Random House Dictionary*, page 1817 (1993) referred to at page 11 of the Answer; *General Chemistry*, Whitten et al,

Appeal No. 97-2787

Reexamination Nos. 90/003,346 and 90/003,873

Chapter 10, "Solutions," page 273, Saunders College

Publishing, 1981, attached herewith. This interpretation is

consistent with appellant's own specification which includes

the treatment of both liquid and gaseous hydrocarbons. See

column 1, lines 29-44, column 2, lines 56-61 and column 3,

lines 5-15. The specification, for example, states at column

1, lines 29-44:

Furthermore, hydrogen sulfide is often present in the underground water removed with the crude oil, in the crude oil itself and in the gases associated with such water and oil. When the water and oil are separated one from the other by the use of separation tanks, demulsification apparatus and the like, intolerable amounts of hydrogen sulfide are emitted as a gas which is associated with water and hydrocarbon vapors. Natural gases are often sour, that is they contain some hydrogen sulfides.

In accordance with the present invention, hydrocarbon liquids containing hydrogen sulfide, as well as hydrocarbon gases, such as natural gas or off gases from the production transport, storage, and refining of crude oil can be controlled in a convenient and economical manner (emphasis supplied).

Further, we interpret the phrase "a sufficient amount of the [claimed] diaminomethane compound to inhibit hydrogen sulfide gas evolution" recited in, e.g., claims 1, 17 and 42, as requiring **at least** about 10 ppm of the claimed diaminomethane compound. According to claims 2 and 4, the

Appeal No. 97-2787

Reexamination Nos. 90/003,346 and 90/003,873

sufficient amount of the claimed diaminomethane compound recited in claim 1 is, at the minimum, about 10 ppm. The specification also states (column 4, lines 33-43) that:

The amount of the diamine as herein defined effective to inhibit hydrogen sulfide gas liberation will vary, depending on various factors, for example, the particular material to be treated and conditions of production, storage, or transport. In practice, at least an amount of about 10 ppm additive based on the weight of the water or hydrocarbon is used and preferably an amount of at least 100 ppm is used. Amounts of diamine exceeding 10,000 ppm can be employed, but, in general, there is usually no commercial or technical advantage in doing so.

As indicated supra, amounts higher than 10,000 ppm are also **sufficient** to inhibit hydrogen sulfide gas liberation even though they may not provide any additional economic advantages.

The second embodiment recited in claims 17 through 25, 35 and 42 through 46 is directed to a composition comprising a material comprising water or a hydrocarbon, and a sufficient amount of the diaminomethane compound defined by the claimed formula to inhibit hydrogen sulfide gas liberation. Claims 42 through 46 limit the material to liquid hydrocarbons. The

Appeal No. 97-2787

Reexamination Nos. 90/003,346 and 90/003,873

functional language "to inhibit hydrogen sulfide gas liberation" refers back to the amount of the claimed diaminomethane compound employed. It limits the claimed "sufficient amount" of the diaminomethane compound to the amount that could inhibit hydrogen sulfide gas liberation. As indicated supra, such a "sufficient amount" is **at least** about 10 ppm. The functional language, however, does not **require** the claimed hydrocarbon or water to contain hydrogen sulfide. We will not read limitations in the specification into the claims. See Etter, 756 F.2d at 858, 225 USPQ at 5; Yamamoto 740 F.2d at 1571, 222 USPQ at 936.

Appeal No. 97-2787
Reexamination Nos. 90/003,346 and 90/003,873

PRIOR ART REJECTION

§ 103 REJECTION BASED ON THE DOERGES REFERENCE

PROCESS CLAIMS 1 AND 3

As evidence of obviousness of the subject matter defined by claims 1 and 3, the examiner relied on the Doerges references. As indicated by the examiner at page 5 of the Answer, the Doerges reference describes a process for removing hydrogen sulfide from natural gas (hereinafter referred to as a gaseous hydrocarbon). See also column 1, lines 16-19 in conjunction with abstract, lines 1-2. To remove hydrogen sulfide, the gaseous hydrocarbon to be treated is initially introduced into an absorbing zone. See column 4, lines 29-30 in conjunction with example 2, column 7, lines 10-15. To the top end of the absorbing zone, an absorbent solution is then introduced, thus causing the addition of the absorbent solution to the gaseous hydrocarbon to be treated in the absorbing zone before being separated. See column 4, lines 35-41. The absorbent solution useful for removing H₂S contains the claimed diaminomethane compound in a total amount of 0.5 to 5 moles per liter of the absorbent solution. See column 1, lines 49-62. This total amount, according to

Appeal No. 97-2787

Reexamination Nos. 90/003,346 and 90/003,873

appellant at page 37 of the Brief, translates into the amount greater than 10,000 ppm, i.e., a sufficient amount to inhibit hydrogen sulfide gas evolution. The absorbent solution also contains an organic solvent, such as methanol. See column 2, lines 10-28. Although the Doerges reference is silent as to appellant's newly discovered benefit of suppressing hydrogen sulfide from a gaseous hydrocarbon as urged by appellant at pages 2 and 3 of the Reply Brief and pages 10-12 and 31-33 of the Brief, we do not find such a new benefit to impart patentability to the claimed process since both the claimed process and Doerges' process add "a sufficient amount" of the claimed diaminomethane compound to a gaseous hydrocarbon containing hydrogen sulfide. As pointed out by In re Woodruff, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990):

It is a general rule that merely discovering and claiming a new benefit of an *old* process cannot render the process again patentable. *Verdegaal Bros., Inc. v. Union Oil Co. of Calif.*, 814 F.2d 628, 632-33, 2 USPQ2d 1051, 1054 (Fed. Cir), *cert. denied*, 484 U.S. 827 (1987); *Bird Provision Co. v. Owens Country Sausage, Inc.*, 568 F.2d 369, 375, 197 USPQ 134, 139 (5th Cir. 1978). While the processes

Appeal No. 97-2787

Reexamination Nos. 90/003,346 and 90/003,873

encompassed by the claims are not entirely *old*, the rule is applicable here to the extent that the claims and the prior art overlap.

Appellant alleges that the Doerges reference does not "add" an absorbent solution containing the claimed diaminomethane to the gaseous hydrocarbon containing dissolved hydrogen sulfide. See Reply Brief, page 13. According to appellant, "[t]he [absorbent] solution contacts the gas[eous] [hydrocarbon] but cannot be described as being added to it." Id. As can be seen from the above, we do not subscribe to appellant's position. To place an absorbent solution in direct (and intimate) contact with the gaseous hydrocarbon as required by the Doerges reference, one of them must necessarily be added to the other. Indeed, appellant also adds the claimed diaminomethane to a hydrocarbon in order to bring it into "intimate contact" with the hydrocarbon. See column 3, lines 5-15.

Appellant argues that the phrase "a hydrocarbon containing dissolved hydrogen sulfide" refers to a liquid hydrocarbon containing hydrogen sulfide. See Brief, pages 12 and 13. In support of his position, appellant refers to *Hack's*

Appeal No. 97-2787

Reexamination Nos. 90/003,346 and 90/003,873

Chemical Dictionary and *Webster's New World Dictionary for the American Language* for the definitions of "dissolved" and/or "solution". See Brief, pages 23 and 27. The *Hack's Chemical Dictionary*, for example, defines "dissolved" as "in a state of solution" and a "solution" as "mixing of a solid, liquid or gaseous substance with a liquid". See Brief, page 23. According to appellant, these definitions necessarily require one of ordinary skill in

Appeal No. 97-2787
Reexamination Nos. 90/003,346 and 90/003,873

the art to interpret "a hydrocarbon containing dissolved hydrogen sulfide" as a liquid hydrocarbon containing the same. See Brief, pages 23 and 27.

We do not share appellant's view. Although the above dictionaries appear to support appellant's position, other evidence points to the contrary. Specifically, the *Random House Dictionary of the English Language* and *Hawley's Condensed Chemical Dictionary* referred to by the examiner at pages 9 and 11 of the Answer indicate that the term "solution" can embrace a gas dissolved in a gas. See also *General Chemistry* referred to above. In other words, a hydrocarbon containing dissolved hydrogen sulfide can be in a gaseous form. See Answer, pages 9-11. Accordingly, we concur with the examiner that the **broadest** reasonable interpretation of "a hydrocarbon containing dissolved hydrogen sulfide" encompasses gaseous hydrocarbons containing the same, such as the one taught by the Doerges reference. As pointed out by In re Morris, 127 F.3d 1048, 1051, 43 USPQ2d 1753, 1759 (Fed. Cir. 1997),

[absent an express definition in their specification, the fact that appellants can point to definitions or usages that conform to

Appeal No. 97-2787

Reexamination Nos. 90/003,346 and 90/003,873

their interpretation does not make the [examiner's] definition unreasonable when the [examiner] can point to other sources that support their interpretation.

Appellant appears to argue that the other claim terms "liberation of hydrogen sulfide gas," "to inhibit hydrogen sulfide gas evolution", "adding", "liberation" and "evolution" further support his position that the hydrocarbon recited is a liquid hydrocarbon. See Brief, pages 13 and 26. Appellant, however, does not explain how these terms limit the claimed hydrocarbon to a liquid hydrocarbon. In fact, the specification does not support appellant's position. Appellant has not pointed to that portion of the specification which limits the use of such terms to the treatment of a liquid hydrocarbon only.

Appellant also appears to argue that the examiner's interpretation is inconsistent with appellant's specification. See Brief, page 26. Specifically, appellant argues that the "[t]he specification consistently treats the unmodified noun 'hydrocarbon' as a liquid." In support of this argument, appellant refers to column 3, lines 5-15, of the specification, which states:

Appeal No. 97-2787

Reexamination Nos. 90/003,346 and 90/003,873

The present invention comprises a method including the step of bringing into reactive intimate contact water or a hydrocarbon, such as crude oil, petroleum residual fuel and the like with certain diaminomethanes. Instead of contacting the diaminomethane with the water or hydrocarbon, the diaminomethane can be contacted with wet or dry gaseous mixtures of hydrogen sulfide and hydrocarbon vapors, such as is found in natural gas or obtained

Appeal No. 97-2787

Reexamination Nos. 90/003,346 and 90/003,873

in the drilling, removal from the ground,
storage, transport, and processing of crude
oil.

The specification as a whole, however, does not support appellant's position that the term "a hydrocarbon" is used to signify only a liquid hydrocarbon. The phrase "a hydrocarbon such as crude oil, petroleum residual fuel and the like" merely indicates a simple truism that the term "hydrocarbon" includes, inter alia, certain preferred liquid hydrocarbons.

g27

It does not require that the term "a hydrocarbon" be limited to a liquid hydrocarbon. Similarly, the phrase relating to contacting certain diaminomethanes with a hydrocarbon or wet or dry gaseous mixtures of hydrogen sulfide and hydrocarbon vapors does not indicate that a hydrocarbon is liquid. It merely indicates that a gaseous mixture, water or a hydrocarbon (which can be liquid or gaseous) can be contacted with certain diaminomethanes. Indeed, the tenor of the specification indicates that appellant recognizes the difference between "liquid hydrocarbons" and "hydrocarbons". This is evident from column 1, lines 29-44, of the specification. See also claims 37 and 42.

Appeal No. 97-2787
Reexamination Nos. 90/003,346 and 90/003,873

Appellant argues that the statements of certain adverse technical experts to the instant patent also establish that the term "a hydrocarbon containing dissolved hydrogen sulfide" means a liquid hydrocarbon containing the same. See Brief, page 22 and Reply Brief, pages 7-9. These statements, according to appellant, appear at pages 182 to 186 of the Deposition Transcript of John M. Ferrara and pages 133 to 137 of the Deposition Transcript of Arthur L. Kohl. See Brief, page 22. The examiner disagrees with appellant's interpretation of the statements in the Deposition Transcripts. See Answer, pages 12-14. The relevant portions of the Deposition Transcripts relied on by both the examiner and appellant are shown below:

Mr. Kohl's Testimony at Pages 133 and 134 of the Transcript Deposition

Q. Okay. With respect to natural gas in its gaseous state, if that natural gas contains a content of hydrogen sulfide, in what form of state would the content of hydrogen sulfide exist?

A. Gas

Q. Okay. And, would you consider that hydrogen sulfide gas that exists in a natural gas to exist in the state of being dissolved?

Appeal No. 97-2787

Reexamination Nos. 90/003,346 and 90/003,873

- A. In the broad sense, gaseous mixtures are solutions, and it is fluid and therefore dissolved. I think in the common usage, dissolved is usually referred to solids or liquids.

Appeal No. 97-2787

Reexamination Nos. 90/003,346 and 90/003,873

Mr. Ferrara's Testimony at Pages 182,183, 185 and
186 of the Transcript Deposition

Q. If you used the terms containing dissolved hydrogen sulfide would that imply the hydrocarbon is a liquid?

A. Not necessarily.

Q. What else could it be?

A. Could be a gas.

Q. Do you know of any gaseous feed stream in the petroleum industry which would contain dissolved hydrogen sulfide gas?

A. I would term it dispersed.

Q. I would like you to answer my question.

Are you aware of any gaseous feed stream in the petroleum industry that would contain a dissolved hydrogen sulfide gas?

A. Again, I would prefer the terminology dispersed.
I wouldn't use that terminology.

Q. So are you saying that the gas is not dissolved?

A. I'm saying that I wouldn't use that terminology.
I don't know that others would not use that terminology.

Q. Is that terminology incorrect for hydrocarbon gases?

A. I would think of it as being incorrect.

Appeal No. 97-2787
Reexamination Nos. 90/003,346 and 90/003,873

Q. But it would be correct if it was used in conjunction with a liquid hydrocarbon, isn't that right?

A. Yes.

The review of the above statements leads us to conclude that appellant's argument is unsupported. See the examiner's finding at pages 13 and 14 of the Answer, as well as appellant's rebuttal at pages 7 through 9 of the Reply Brief. Nowhere do the statements indicate that **one having ordinary skill in the pertinent art** would have interpreted "a hydrocarbon containing dissolved hydrogen sulfide" as "a liquid hydrocarbon containing the same". While the statements as a whole appear to indicate that a common concept of a "solution" is the one which uses liquid solvents (e.g., liquid hydrocarbon), the term "solution" is also reasonably considered in a broader sense to include a gas dissolved in a gas. We note that the broadest reasonable meaning prevails in the present merged reexamination proceeding.

Appellant relies on Gentex Corp. v. Donnelly Corp., 527 F.3d 527, 530, 36 USPQ2d 1667, 1669 (Fed. Cir. 1995) to support a conclusion that the term "a hydrocarbon containing

Appeal No. 97-2787
Reexamination Nos. 90/003,346 and 90/003,873

dissolved hydrogen sulfide" refers to a liquid hydrocarbon. However, we observe that appellant's reliance is misplaced. Donnelly Corp. is of little or no import in patent prosecution. As aptly explained by the examiner at page 15 of the Answer, Donnelly Corp. was rendered under different circumstances and in a different context. In other words, Donnelly Corp. involved different facts, as well as a different mode of claim interpretation, i.e, the mode of claim interpretation applicable to litigation involving infringement and validity, rather than prosecution involving reexamination of patent applications. As also indicated supra,

[a]bsent an express definition in their specification, the fact that appellants can point to definitions or usages that conform to their interpretation does not make the [examiner's] definition unreasonable when the [examiner] can point to other sources that support their interpretation. Morris, 127 F.3d at 1051,
43 USPQ2d at 1759.

In view of the foregoing, we are of the view that the examiner did not err in rejecting claims 1 and 3 under § 103 over the Doerges reference. Accordingly, the decision of the examiner rejecting claims 1 and 3 based on the Doerges reference is affirmed.

Appeal No. 97-2787
Reexamination Nos. 90/003,346 and 90/003,873

PROCESS CLAIMS 2, 4 AND 6 THROUGH 9

Claims 2, 4 and 6 through 9 further limit claim 1 or 3 by requiring a particular proportion of the claimed diaminomethane compound to be present in the claimed process. Specifically, the claims require 10 ppm to 10,000 ppm, preferably 100 ppm to 1000 ppm, of the claimed diaminomethane based on all of the materials in the claimed process, including a material comprising a hydrocarbon containing dissolved hydrogen sulfide.

Appellant contends that the Doerges reference does not describe, nor would have suggested, using the claimed proportion of the claimed diaminomethane compound. See Brief, page 37.

In support of his position, appellant refers to his calculation which allegedly establishes that the amount of the diaminomethane compound employed in Doerges' process is greater than 10,000 ppm, i.e., 64,000 ppm to 640,000 ppm.

As correctly pointed out by the examiner, appellant's calculation did not take into account a hydrocarbon gas containing dissolved hydrogen sulfide. When the hydrocarbon

Appeal No. 97-2787
Reexamination Nos. 90/003,346 and 90/003,873

gas, which is present in a significant amount in Doerges' process, is taken into account, the Doerges reference appears to include a proportion of the claimed diaminomethane compound which is embraced by the claims. A document submitted by appellant, together with the Brief, confirms our view that the Doerges reference describes the claimed proportion of the claimed diaminomethane compound. See page 6, Report of Arthur Kohl under Rule 26 (a)(2)(B) of the Federal rules of Civil Procedure proffered by appellant. To the extent that the Doerges reference does not describe the claimed proportion of the claimed diaminomethane compound, we are of the view that the determination of the optimum or workable proportion of the claimed diaminomethane compound would have been obvious to one of ordinary skill in the art inasmuch as the Doerges references indicates that the proportion of the claimed diaminomethane is a function of the content of hydrogen sulfide, i.e., a result effective variable. See In re Woodruff, 919 F.2d at 1578, 16 USPQ2d at 1936-37; In re Boesch, 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980).

PROCESS CLAIMS 5, 6 and 9

Claim 5 further limits claim 1 by specifying the claimed

Appeal No. 97-2787
Reexamination Nos. 90/003,346 and 90/003,873

diaminomethane compound as a bis(di-n-butylamino)methane. Claims 6 and 9 also require the claimed diaminomethane compound to be a bis(di-n-butylamino)methane since they are dependent on claim 5.

Appellant contends that the Doerges reference does not describe, nor would have suggested, the claimed bis(di-n-butylamino)methane. According to appellant, the Doerges reference "expressly excludes the possibility that its diaminomethane can have alky groups greater than propyl groups or that its diaminomethane can have a boiling point greater than 110°C at 1 bar."

We observe that the Doerges reference describes a bis(di-n-propylamino)methane as its diaminomethane compound. See column 1, lines 54-55 and column 2, lines 38-40. We also note that appellant has not challenged the examiner's finding that bis(di-n-propylamino)methane described in the Doerges reference is structurally similar to the claimed bis(di-n-butylamino)methane. Compare the examiner's reference to "homolog" at page 19 of the Answer with appellants' Brief and Reply Brief in their entirety. Further, we observe that

Appeal No. 97-2787

Reexamination Nos. 90/003,346 and 90/003,873

appellant has not established by any objective evidence that the claimed bis(di-n-butylamino)methane has a boiling point which is higher than 110°C. On this record, we are constrained to agree with the examiner that it would have been obvious to one of ordinary skill in the art to employ the claimed bis(di-n-butylamino)methane, in lieu of bis(di-n-propylamino) methane, in Doerges' process since one of ordinary skill in the art would have had a reasonable expectation that bis(di-n-propylamino) methane and bis(di-n-butylamino)methane would have behaved in a similar manner due to their very close structural similarities. See In re Payne, 606 F.2d 303, 313, 203 USPQ 245, 254 (CCPA 1979); In re Gyurik, 596 F.2d 1012, 1018, 201 USPQ 552, 557 (CCPA 1979).

PRODUCT CLAIMS 17-22

As indicated supra, claim 17 is drawn to a composition comprising a material containing water or hydrocarbon and a sufficient amount of a particular diaminomethane compound selected from those covered by the claimed formula. Claims 19

Appeal No. 97-2787

Reexamination Nos. 90/003,346 and 90/003,873

and 21, like process claims 3 and 5, limit the diaminomethane compounds covered by the claimed formula to several specific compounds. Claims 18, 20 and 22 further limit the claimed amount of the particular diaminomethane compound to a specific range.

As indicated supra, the Doerges reference describes adding to a hydrocarbon gas an absorbent solution containing methanol and the claimed diaminomethane compound. This addition results in forming a mixture containing a hydrocarbon gas, methanol and a particular amount of the claimed diaminomethane compound. By virtue of using the term "comprising" in the preamble, however, the claims do not preclude the presence of components, such as methanol, in the claimed composition. Thus, we agree with the examiner that the Doerges reference describes the composition recited in claim 17. Note that the complete description of the claimed composition is the ultimate of obviousness. See In re Fracalossi, 681 F.2d 792, 794, 215 USPQ 569, 571 (CCPA 1982).

In addition, the employment of the specific amounts of the particular diaminomethane compounds recited in claims 18 through 22 in the composition described in the Doerges

Appeal No. 97-2787
Reexamination Nos. 90/003,346 and 90/003,873

reference would have been obvious within the meaning of 35 U.S.C. § 103 for the reasons indicated supra.

PRODUCT CLAIMS 42-46

Claims 42 through 46 are drawn to a composition containing a liquid hydrocarbon and a sufficient amount of the claimed diaminomethane compound. As indicated supra, the Doerges reference is directed to treating a gaseous hydrocarbon with an absorbent solution containing the claimed diaminomethane compound in an absorber. The examiner, however, has not offered any evidence that would have led one of ordinary skill in the art to employ a liquid hydrocarbon in Doerges' absorber. Thus, we do not agree with the examiner that the Doerges reference would have rendered the composition defined by claims 42 through 46 obvious within the meaning of 35 U.S.C. § 103. Accordingly, we reverse the examiner's decision rejecting claims 42 through 46 over the Doerges reference.

§ 102 OR § 103 REJECTION BASED ON THE CHAMOT REFERENCE

Turning to the examiner's rejection of claims 17 through 25, 35 and 42 through 46 under § 102 or § 103 over the Chamot reference, we note that the examiner states (Answer, page 4):

Chamot '550 discloses a process whereby a diaminomethane compound is added

Appeal No. 97-2787

Reexamination Nos. 90/003,346 and 90/003,873

to a petroleum fraction. The diaminomethane compound disclosed is an amine-formaldehyde reaction product prepared by mixing together formaldehyde solution with aliphatic primary and secondary amines (Chamot '550, column 4 lines 4-8). Chamot '550 discloses that the composition added to the petroleum fraction contains from 5 to 50 weight % of amine/formaldehyde reaction product (Chamot '550, column 4, lines 21-24).

A careful review of the Chamot reference, however, reveals that it does not specifically mention the claimed diaminomethane compound. It only mentions incorporating "amine-formaldehyde reaction products" into a hydrocarbon fraction. See column 1, lines 58-63. The amine-formaldehyde reaction products, according to the Chamot reference, are "prepared by mixing together at room temperature formaldehyde solution . . . with aliphatic primary and secondary monoamine" See column 4, lines 4-8. Recognizing this deficiency, the examiner appears to take the position that the amine-formaldehyde reaction products described in the Chamot reference are actually the claimed diaminomethane compounds because they are formed from using the same ingredients which are said to be useful for forming the claimed diaminomethane compounds. In other words, the claimed diaminomethane

Appeal No. 97-2787
Reexamination Nos. 90/003,346 and 90/003,873

compounds would be inherently incorporated into the hydrocarbon fraction since they would be inherently formed from mixing the ingredients useful for forming the claimed diaminomethane compounds at room temperature.

To establish inherency under § 102 or § 103, the examiner has the initial burden of supplying evidence and/or scientific reasoning to support a conclusion that the claimed diaminomethane compounds would invariably or inevitably be formed from mixing formaldehyde solution with aliphatic primary and secondary amines at room temperature. In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992) ("the examiner bears the initial burden, on review of the prior art, or on any other ground, of presenting a prima facie case of unpatentability"); Ex parte Levy, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Int. 11990) ("[i]n relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art"). The mere possibility or probability that such diaminomethane compounds may be formed

Appeal No. 97-2787
Reexamination Nos. 90/003,346 and 90/003,873

is not sufficient. See In re Oelrich, 666 F.2d 578, 581, 212 USPQ 323,326 (CCPA 1981); Ex parte Skinner, 2 USPQ2d 1788, 1788-89 (Bd. Pat. App. & Int. 1986).

The '991 patent specification relied on by the examiner does not indicate that the claimed diaminomethane compounds can be invariably formed by mere mixing of the ingredients in question. It requires that the mixing be carried out at conventional dehydrating conditions or conventional reaction conditions for making diaminomethane compounds, such as those employed in specification example 2. See column 3, lines 66-68, in conjunction with column 4, lines 21-23. As correctly observed by appellant (Brief, pages 40 and 41), the examiner has not established that the conditions disclosed by the Chamot reference are appropriate reaction conditions for making the claimed diaminomethane compounds, much less the claimed quantity of the diaminomethane compounds. Thus, the examiner has not established a prima facie case of unpatentability under § 102 or § 103. Accordingly, we reverse the examiner's decision rejecting claims 17 through 25, 35 and 42 through 46 under § 102 or § 103 over the Chamot reference.

§ 103 REJECTION BASED ON THE KASPAUL REFERENCE

Appeal No. 97-2787

Reexamination Nos. 90/003,346 and 90/003,873

In rejecting claims 17 through 22, 35 and 42 through 46 over the Kaspaul reference, the examiner states (Answer, page 6) that:

The Kaspaul patent discloses a fuel composition comprising a mixture of hydrocarbons and a tertiary diamine in amount of 0.5 to 4.0 milliliters to 20 gallons of hydrocarbon component which translates into 6.6 to 52.9 ppm (this overlaps the 10-10,000 ppm instantly claimed) and an effective amount of alcohol. (see claim 1 for example). The instant claimed composition fails to exclude presence of alcohols. Kaspaul discloses a composition comprising an effective amount of a diaminomethane and a hydrocarbon material (see column 2 line 40 to column 3, line 34).

We agree with the examiner to the extent that the rejection is applied against claims 17 through 22, 35 and 42 through 45. As indicated supra, the claims, as broadly recited, not only do not require the presence of hydrogen sulfide in the claimed composition, but also do not preclude the presence of alcohols in the claimed composition. Thus, we agree with the examiner that the claimed composition is not patentably different from that described in the Kaspaul reference. Note that the complete description of the claimed composition is the ultimate of obviousness. See Fracalossi, 681 F.2d at 794, 215

Appeal No. 97-2787
Reexamination Nos. 90/003,346 and 90/003,873

USPQ at 571.

Claim 46, however, is on a different footing. It is directed to petroleum residue which is materially different from the liquid hydrocarbons used in the Kaspaul reference. The examiner has not explained why it would have been obvious to employ petroleum residue in the fuel composition of the type described in the Kaspaul reference.

In view of the foregoing, we affirm the examiner's decision rejecting claims 17 through 22, 35 and 42 through 45 over the Kaspaul reference, but reverse the examiner's decision rejecting claim 46 over the Kaspaul reference.

Under the provision of 37 CFR § 1.196(b), we will enter a new ground of rejection against claims 23 through 25.

Claims 23 through 25 are rejected under 35 U.S.C. § 103 as being unpatentable over the disclosure of either Doerges or Kaspaul. Claims 23 through 25, like claims 6-9, 18, 20 and 22, are directed to using a specific proportion of the claimed diaminomethane compound. As indicated supra, the applied prior art individually describes or would have suggested the claimed proportion of the claimed diaminomethane compound. Thus, for

Appeal No. 97-2787
Reexamination Nos. 90/003,346 and 90/003,873

the reasons indicated supra, we conclude that it would have been obvious to employ the claimed proportion of the claimed diaminomethane compound in the composition described by either the Doerges or the Kaspaul reference.

In summary:

(1) The § 103 rejection of claims 1 through 9 and 17 through 22 over the Doerges reference is sustained;

(2) The § 103 rejection of claims 42 through 46 over the Doerges references is not sustained;

(3) The § 102 or § 103 rejection of claims 17 through 25, 35 and 42 through 46 over the Chamot reference is not sustained;

(4) The § 103 rejection of claims 17 through 22, 35 and 42 through 45 over the Kaspaul reference is sustained;

(5) The § 103 rejection of claim 46 over the Kaspaul reference is not sustained; and

(6) The § 103 rejection of claims 23 through 25 over the Doerges reference or the Kaspaul reference is newly applied under the provision of 37 CFR § 1.196(b).

Accordingly, the decision of the examiner is affirmed-in-part.

Appeal No. 97-2787
Reexamination Nos. 90/003,346 and 90/003,873

In addition to affirming the examiner's rejection of one or more claims, this decision contains a new ground of rejection pursuant to 37 CFR § 1.196(b) (amended effective Dec. 1, 1997, by final rule notice, 62 Fed. Reg. 53,131, 53,197 (Oct. 10, 1997), 1203 Off. Gaz. Pat. & Trademark Office 63, 122 (Oct. 21, 1997)). 37 CFR § 1.196(b) provides, "A new ground of rejection shall not be considered final for purposes of judicial review."

Regarding any affirmed rejection, 37 CFR § 1.197(b) provides:

(b) Appellant may file a single request for rehearing within two months from the date of the original decision

37 CFR § 1.196(b) also provides that the appellant, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of proceedings (37 CFR § 1.197(c)) as to the rejected claims:

(1) Submit an appropriate amendment of the claims so rejected or a showing of facts relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the application will be remanded to the examiner. . . .

(2) Request that the application be reheard under § 1.197(b) by the Board of Patent Appeals and

Appeal No. 97-2787
Reexamination Nos. 90/003,346 and 90/003,873

Interferences upon the same record. . . .

Should the appellant elect to prosecute further before the Primary Examiner pursuant to 37 CFR § 1.196(b)(1), in order to preserve the right to seek review under 35 U.S.C. §§ 141 or 145 with respect to the affirmed rejection, the effective date of the affirmance is deferred until conclusion of the prosecution before the examiner unless, as a mere incident to the limited prosecution, the affirmed rejection is overcome.

If the appellant elects prosecution before the examiner and this does not result in allowance of the application, abandonment or a second appeal, this case should be returned to the Board of Patent Appeals and Interferences for final action on the affirmed rejection, including any timely request for reconsideration thereof.

Appeal No. 97-2787
Reexamination Nos. 90/003,346 and 90/003,873

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

Further proceedings in this case may be taken in accordance with 35 U.S.C. § 141 to 145 and 306, and 37 CFR § 1.301 to § 1.304. Note also 37 CFR § 1.197(b). If the patent owner fails to continue prosecution, the reexamination proceeding will be terminated, and a certificate under 35 U.S.C. § 307 and 37 CFR § 1.570 will be issued canceling the patent claims, the rejections of which have been affirmed or the rejection of which has been newly raised.

AFFIRMED-IN-PART

WILLIAM F. SMITH)	
Administrative Patent Judge)	
)	
)	
)	
)	BOARD OF PATENT
CHUNG K. PAK)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
)	

JENINE GILLIS

Appeal No. 97-2787
Reexamination Nos. 90/003,346 and 90/003,873

Judge PAK

Judge WALTZ

Judge WILLIAM F. SMITH

Received: 26 Sep 98

Typed: 26/28 Sep 98

DECISION: AFFIRMED-IN-PART

Send Reference(s): Yes No
or Translation(s)

Panel Change: Yes No

3-Person Conf. Yes No

Remanded: Yes No

Brief or Heard

Group Art Unit: 1106

Index Sheet-2901 Rejection(s): _____

Acts 2: _____

Palm: _____

Mailed: Updated Monthly Disk (FOIA): _____

Updated Monthly Report: _____