

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 15

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte J. OWEN HENDLEY, JACK M. GWALTNEY, JR.
and DEBORAH F. THACKER

Appeal No. 95-3640
Application 08/147,742¹

HEARD: JANUARY 14, 1999

Before WARREN, OWENS and WALTZ, *Administrative Patent Judges*.
OWENS, *Administrative Patent Judge*.

DECISION ON APPEAL

This is an appeal from the examiner's final rejection of claims 1-6, which are all of the claims in the application.

THE INVENTION

¹ Application for patent filed November 5, 1993.

Appellants' claimed invention is directed toward a method for killing rhinoviruses, protecting against infection by rhinoviruses, and preventing the spread of rhinovirus induced colds, by applying to the hands a composition which includes, in amounts sufficient for eradicating rhinoviruses, citric acid, malic acid and a C₁₋₆ alcohol. Claims 1 and 4 are illustrative and read as follows:

1. A method for killing rhinoviruses and preventing the spread of rhinovirus induced colds, comprising the steps of:

identifying a patient who is suffering from a rhinovirus cold or is likely to be exposed to rhinoviruses; and

applying to the hands of said patient a virucidal composition comprising citric acid, malic acid, and C₁₋₆ alcohol, said virucidal composition including said citric acid, malic acid, and C₁₋₆ alcohol in amounts suitable for eradicating rhinoviruses, said step of applying being performed after said patient is identified as suffering from a rhinovirus cold or prior to said patient being exposed to rhinoviruses.

4. A method for protecting against infection by rhinoviruses, comprising the step of applying to the hands of a patient in need of protection from rhinovirus infection a virucidal composition comprising citric acid, malic acid, and a C₁₋₆ alcohol, said virucidal composition including said citric acid, malic acid, and C₁₋₆ alcohol in amounts suitable for eradicating rhinoviruses.

THE REFERENCES

Benedykt Mazur and Wanda Paciorkiewicz (Mazur), "Effect of some disinfectants on virus activity", *Chemical Abstracts*

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83:1409r (1975).

"212. Alcohol, Anhydrous. *Ethanol, ethyl alcohol*", *Merck Index* 207 (Merck & Co., 10th ed. 1983).

John Ejnar Anderson, "Treatment of infections with acids and salts", *Chemical Abstracts* 114:199662t (1991).

Ulrich Kirschner and Thomas Pohl (Kirschner), "Citric acid-based aqueous disinfectant for inactivation of hepatitis B virus, bacterial spores and *Legionella pneumonia*", *Chemical Abstracts* 117:220180h (1992).

THE REJECTIONS

Claims 1-6 stand rejected as follows: under 35 U.S.C. § 101 on the ground that the claimed invention lacks patentable utility; under 35 U.S.C. § 112, first paragraph, on the ground that the specification fails to provide an enabling disclosure; under 35 U.S.C. § 103 as being unpatentable over *Merck Index*, Mazur, Andersen and Kirschner.

OPINION

We have carefully considered all of the arguments advanced by appellants and the examiner and agree with appellants that the aforementioned rejections are not well founded. Accordingly, we do not sustain these rejections.

Rejection under 35 U.S.C. § 101

Before utility is determined, the claims must be

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interpreted to define the invention to be tested for utility. See *Raytheon Co. v. Roper Corp.*, 724 F.2d 951, 956, 220 USPQ 592, 596 (Fed. Cir. 1983), *cert denied*, 469 U.S. 835 (1984). During patent prosecution, claims are to be given their broadest reasonable interpretation consistent with the specification, and the claim language is to be read in view of the specification as it would be interpreted by one of ordinary skill in the art. See *In re Zletz*, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989); *In re Sneed*, 710 F.2d 1544, 1548, 218 USPQ 385, 388 (Fed. Cir. 1983); *In re Okuzawa*, 537 F.2d 545, 548, 190 USPQ 464, 466 (CCPA 1976). However, limitations are not to be read from the specification into the claims. See *In re Prater*, 415 F.2d 1393, 1405, 162 USPQ 541, 551 (CCPA 1969). "Claim interpretation is a question of law, reviewed non-deferentially on appeal." See *Mantech Environmental Corp. v. Hudson Environmental Services*, 152 F.3d 1368, 1371, 47 USPQ2d 1732, 1735 (Fed. Cir. 1998).

The preamble of appellants' claim 1 reads as follows: "A method for killing rhinoviruses and preventing the spread of rhinovirus induced colds". Appellants' specification

discloses that the composition recited in claim 1 eradicates rhinoviruses on the hands of human subjects (page 5, lines 28-31), and has been shown experimentally to destroy rhinoviruses for up to two hours after the composition is applied to the hands (page 8, line 28 - page 9, line 1). According to the specification (page 9, lines 11-16), "[t]his application [of a hand lotion containing the composition recited in appellants' claim 1] will kill rhinovirus particles present on the hands of infected individuals, and will kill rhinovirus particles that are transmitted to non-infected individuals via hand-to-hand transmission that are protected by the hand lotion treatment."

In light of appellants' specification, including the disclosures referred to above, one of ordinary skill in the art, in our opinion, would have interpreted the language "preventing the spread of rhinovirus induced colds" in the preamble of claim 1 as meaning preventing the spread of colds which would result from the transfer of rhinoviruses to or from hands which have not had the composition recited in appellants' claim 1 applied to them. Thus, in our view, such a person would not have considered this phrase to encompass

preventing the spread of colds by other mechanisms.

The examiner argues that preventing the common cold with a sanitizing hand wash would have been considered by one of ordinary skill in the art to be an incredible utility (answer, pages 2-5 and 10-12). The examiner's argument is not well taken because it lacks evidentiary support. Also, as discussed above, unlike the examiner, we do not interpret appellants' claim 1 as a method for preventing the spread of colds by all mechanisms. The examiner acknowledges that appellants have shown (specification, page 7, Table 1) that their method kills rhinoviruses (answer, page 11). The examiner has not explained, and it is not apparent, why appellants' claimed method would not have been useful for killing rhinoviruses and thereby "preventing the spread of rhinovirus induced colds" as that phrase is interpreted above.

The preamble of appellants' independent claim 4 reads as follows: "A method for protecting against infection by rhinoviruses". The examiner has not explained, and it is not apparent, why the method recited in appellants' claim 4 would not be useful for protecting against infection by

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rhinoviruses.

For the above reasons, we find that the examiner has not established a *prima facie* case of lack of utility of the invention recited in any of appellants' claims. Consequently, we reverse the rejection of claims 1-6 under 35 U.S.C. § 101.

Rejection under 35 U.S.C. § 112, first paragraph

A specification complies with the 35 U.S.C. § 112, first paragraph, enablement requirement if it allows those of ordinary skill in the art to make and use the claimed invention without undue experimentation. See *In re Wright*, 999 F.2d 1557, 1561, 27 USPQ2d 1510, 1513 (Fed. Cir. 1993); *Atlas Powder Co. v. E.I. du Pont De Nemours & Co.*, 750 F.2d 1569, 1576, 224 USPQ 409, 413 (Fed. Cir. 1984).

The examiner argues that appellants' specification would not have enabled one of ordinary skill in the art to prevent the common cold (answer, pages 5-6). It is our view that one of ordinary skill in the art would have interpreted the preamble of appellants' claim 1 as discussed above, and would not have interpreted it as stating that the method prevents the spread of rhinovirus induced colds by all mechanisms. The

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examiner has not explained, and we do not find, why one of ordinary skill in the art could not have carried out, without undue experimentation, the method recited in appellants' claim 1 as that claim is interpreted above, or in appellants' claim 4 which recites a method for protecting against infection by rhinoviruses. Hence, we reverse the rejection of claims 1-6 under 35 U.S.C. § 112, first paragraph.

Rejection under 35 U.S.C. § 103

Merck Index discloses that ethanol was a known topical anti-infective. Mazur discloses that a mixture of 3% iodine, 2% Mercurochrome, 10% phenol and 47.5% ethanol showed the highest virucidal activity of ten disinfectants and antiseptics tested in vitro against polio type I, vesicular stomatitis, vaccinia and adeno-viruses. Anderson discloses that diseases caused by infections with bacteria, virus and fungi were cured by combined or separate application of acids and salts. Specifically, Anderson states that "[a]dministration of benzoic acid (or Na benzoate) and citric acid inhibited the outbreak of *Herpes labialis*." Kirschner discloses that disinfectants comprising citric acid and,

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optionally, malic acid or lactic acid, are especially suitable for the disinfection of heat-sensitive medical instruments, and that an aqueous 2% citric acid solution inactivated the hepatitis B virus, in vitro.²

The examiner acknowledges that none of the references discloses killing rhinoviruses, but argues that one of ordinary skill in the art would have expected antiviral compounds or compositions to be broadly therapeutic against all viral etiological agents and, therefore, to be effective against rhinoviruses (answer, pages 6-7 and 15). The examiner also argues that both polio viruses and rhinoviruses are in the Picornavirus genus and that one of ordinary skill in the art would have been motivated to use an antiviral disinfectant against members of the same genus (answer, page 16). These arguments are not well taken because they are not supported by

² In the answer (pages 8, 10, 13 and 15), the examiner discusses an article by Hendley (J. Owen Hendley et al., "Evaluation of Virucidal Compounds for Inactivation of Rhinovirus on Hands", 14 *Antimicrobial Agents and Chemotherapy* 690-94, Nov. 1978) which, the examiner states, his rejection does not require (answer, page 13). This article is not included in the statement of the rejection and, therefore, is not properly before us. See *In re Hoch*, 428 F.2d 1341, 1342 n.3, 166 USPQ 406, 407 n.3 (CCPA 1970). We therefore do not discuss the examiner's statements regarding this article.

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evidence. Mere unsupported speculation is not a sufficient basis for a rejection. See *In re Warner*, 379 F.2d 1011, 1017, 154 USPQ 173, 178 (CCPA 1967), *cert. denied*, 389 U.S. 1057 (1968); *In re Sporck*, 301 F.2d 686, 690, 133 USPQ 360, 364 (CCPA 1962).

The examiner argues that it would have been *prima facie* obvious to one of ordinary skill in the art to combine the compounds disclosed in the references to obtain a composition useful for the same purpose, i.e., antiviral agent (answer, page 7). This argument is not persuasive because the examiner has not shown that the individual components were known in the art to be effective for killing rhinoviruses. Thus, it is not apparent why one of ordinary skill in the art would have expected them to be effective in combination against rhinoviruses.

For the following reasons, we find that the examiner has not set forth a factual basis which is sufficient to support a conclusion of obviousness of the invention recited in any of appellants' claims. Thus, we do not sustain the rejection of claims 1-6 under 35 U.S.C. § 103.

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Since no *prima facie* case of obviousness has been established, we need not address the Hendley declaration (filed June 2, 1994, paper no. 5). See *In re Piasecki*, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984); *In re Rinehart*, 531 F.2d 1048, 1052, 189 USPQ 143, 147 (CCPA 1976).

DECISION

The rejections of claims 1-6 under 35 U.S.C. § 101 on the ground that the claimed invention lacks patentable utility, under 35 U.S.C. § 112, first paragraph, on the ground that the specification fails to provide an enabling disclosure, and under 35 U.S.C. § 103 as being obvious over Merck Index, Mazur, Andersen and Kirschner, are reversed.

REVERSED

	CHARLES F. WARREN)	
	Administrative Patent Judge)	
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	TERRY J. OWENS)	BOARD OF
PATENT	Administrative Patent Judge)	APPEALS AND
)	INTERFERENCES
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