PHIL PHARMAWELTH, INC.,
Petitioner-Appellant,

-versus-

GLAXO GROUP LIMITED OF LONDON, ENGLAND,
Respondent-Apellee,
x----------x

APPEAL NO. 11-03-02
INTER PARTES CASE NO. 15-1998-00041

Petition for Cancellation of:
Patent Registration No. 20574
Filed 18 February 1987
Patent: "PHARMACEUTICAL COMPOSITION"

DECISION

This concern Decision No. 2003-12 dated 27 February 2003 rendered by the Director of the Bureau of Legal Affairs (Director) denying the petition filed the Petitioner-Appellant PHILIPPINE PHARMAWEALTH, INC. (Appellant)[1] to cancel Letters Patent No. 20574 Issued to John Malcolm Padfield, et al. on 18 February 1987, which was subsequently assigned to Respondent-Appellee GLAXO GROUP LIMITED OF LONDON, ENGLAND (Appellee).[2]

The controversy involves the determination as to whether the patent for the pharmaceutical composition under Letters Patent No. 20574 should be cancelled for lack of novelty and inventive step.

Records show that the Appellant filed with the Bureau of Legal Affairs (BLA) on 03 July 1998 on Petition to Cancel Letters Patent No. 20574 for 'Pharmaceutical Composition'.

In its Petition, Appellant alleged that the patent application should not have been granted since the subject thereof does not cover any new invention but, rather, forms part of a prior art. The patent application, according to the Appellant, was only for a derivative covered by Letters Patent No. 13540, and did not introduce anything new; neither did it involve an inventive step which was not obvious to persons skilled in the medical profession.[3]

In its Answer filed 02 February 1999, Appellee interposed that the petition states no cause of action, and is barred by laches and prescription for Appellant's failure to institute it within three years from the publication of the subject letters patent in the Official Gazette. The Appellees further states that Ranitidine Hydrochloride Pharmaceutical Composition with a pH rate of 6.5 to 7.5 involves an inventive step and, therefore, not obvious. According to the Appellee, at the time of filing and examination of the Philippines patent application, no body of knowledge existed which taught that a pharmaceutical composition with that range of pH values would result or constitute a more stable product with a much longer shelf life. It look several studies and calculation by the inventors to reach the condition not otherwise reachable by mere reasoning that a far superior product with longer lasting shelf life would be achieved by using a pH value the range of 6.5 to 7.5.[4]

On 27 February 2003, the Director rendered the assailed Decision. The Appellant filed a Motion for Reconsideration on 18 March 2003 but was denied by the Director per Resolution No. 2003-11 (D) dated 39 September 2003.

Hence, this appeal.

In its appeal, Appellant contends that the Director erred in not ordering the cancellation of patent No. 20574 for not being new and patentable.[5] The Appellant further claims that contrary to the ruling of the Director, it is a standard practice and a matter of routine formulation in the development of pharmaceutical compositions to conduct pH profiles aimed at determining the range of pH for optimum stability of pharmaceutical compositions.[6] It also contends that the alleged ten-fold increase in the stability of Ranitidine solution allegedly resulting from the adjustment of its pH from 5.5 to 7.0 does not render Patent No. 20574 inventive since: (a) Patent No. 13540 does not

teach that Ranitidine solutions are most stable at pH 5.5 and, hence, there is no basis for ruling that there is a significant improvement in the stability of the pharmaceutical composition covered by Patent No. 20574 over that of Patent No. 13540; and (b) A finding of a ten-told difference is stability between pharmaceutical compositions of different pH levels is not a surprising or unexpected result for a person skilled in the art.[7]

For its part, the Appellee in its comment to the appeal, claims that Letters Patent No. 20574 issued in the name of Appellee is presumed valid, and satisfies the requirement of novelty and inventive step.[8]

This Office resolves first the procedural issue raised by the Appellee that the instant action is barred by laches and prescription in that Appellant failed to institute this proceeding within three (3) years from the publication of the subject letters patent in the Official Gazette.[9] This Office yields to the findings of the Director that the petition is not barred by prescription considering that Republic Act No. 8293 omitted the three (3) years prescription period that was provided under Republic act No. 165. According to the Director, settled is the rule that procedures not affecting substantive rights may be given retroactive effect, there being no vested rights in rules of procedures.[10] This Office agrees with the Director in finding no evidence that Appellant is guilty of laches, and likewise, no evidence was presented by the Appellee that the Appellant, despite its awareness of the existence of Letters patent No. 20574, omitted its right to file the instant petition for an unreasonable length of time.[11]

Going to the main issue of this case, this Office does not agree with Appellant's claim that Patent No. 20574 is not new and does not involve an inventive step. On the issue of novelty, the Appellee is correct when it claimed that Letters Patent No. 20574 issued in its name is presumed valid.[12] significantly, the burden of proving want of novelty is on him who avers it and the burden is a heavy one which is met only by clear and satisfactory proof which overcomes every reasonable doubt. There is a presumption that the (Philippine Patent) Office has correctly determined the patentability of the model and such action must not be interfered with in the absence of competent evidence to the contrary.[13]

In this instance, Appellant put into issue the novelty of Patent No. 20574, contending that the formulation covered by Patent No. 20574 is not new since it already forms part of the formulation of Ranitidine covered by the expired Patent No. 13540.[14]

Republic Act No. 165, the Applicable law provides that, to wit:

Sec. 9. *Invention not considered new or patentable.-* An invention shall not be considered new or capable of being patented if it was known or used by other in the Philippines before the invention by the inventor named in an application for patent for the invention, or if it was patented or described in any printed publication in the Philippines or any foreign country more than one year before the application for a patent therefore; or if it had been in public use or on sale in the Philippines for more than one year before the application for the patent therefore; or if it is the subject matter of a validly issued patent in the Philippines granted on an application filed before the filing of the application for patent therefore.[11]

Aptly, in determining whether a patent has been anticipated by a prior art reference, the claim of the said must read or include every element in the prior art reference. In other words, each and every element of the claimed invention must be disclosed in a prior art reference.[15] If there is even the slightest difference between what is claimed and what is disclosed in the prior art reference, then there is no application.[16]

While the Appellant claims that the subject matter covered by Patent No. 20574 is only a precursor of one of the formulations covered by Patent No. 13540,[17] The Director however is correct in her observation that, while 13540 patent in its oral or injectable form has a pH greater than 5.0 prior to the addition of an acid, it does not necessary mean that the original pH is between 6.5 to 7.5. What the 13540 patent says is the acid is added to the solution until the pH reaches 5.0, which

means that the original pH level of the solution could be any figure greater than 5.0 but not exceeding 14.0 (with 14.0 being the highest reference value for pH profiles). Indeed, the conclusion by Appellant that the pH level includes a level between 6.5 to 7.5 is rather speculative considering that the claims and abstract of the 13540 patent do not disclose anything about is pH being exactly at 6.5 to 7.5 prior to the addition of an acid. Without any disclosure on this range of pH, the claims of the 20574 patent do not read on or include every element in the 13540 patent.[18]

As noted by the Director, it is clear in this case that one of the limitations of the 20574 patent is its pH level. In Claim no. 1, the inventors are claiming a pharmaceutical composition comprising an aqueous formulation of ranitidine and/or physiologically acceptable salts thereof, said formulation having pH within the range of 6.5 to 7.5. The abstract also refers to aqueous formulations of ranitidine, which have been found to have an enhanced shelf life provided that they are formulated with a pH in the range of 6.5-7.5. On the other hand, not one of the forty-five claims of the 13540 patent mentions the pH level as being one of the limitations of said patent. Neither does the abstract nor the specifications disclose anything about the pH level as being a necessary limitation of the patent. As mentioned earlier, without this element, the 13540 patent can never serve as an anticipatory prior art reference, and the claim of the 20574 patent cannot be said to read on or include every element in 13540 patent.[19]

This Office took note of the Appellant's attempt to show that 13540 patent has an equivalent pH of 6.7 to 7.5 by using 200 mg. Of ranitidine in 2 ml. of water, which according to the Appellant will yield a ranitidine content of 99.0099% by weight (and, therefore, has an equivalent pH of 6.7 to 7.5).[20] This Office concurs with the Director that the Appellant's computation is erroneous.[21]

Accordingly, a document will only destroy the novelty of any invention claimed if the subject matter is explicitly contained in the document, and lack of novelty can only be found if the document by itself contains all the characteristics of that claim, that is, it anticipates the subject matter of the claim.[22]

With respect to the second issue, this Office finds Patent No. 20574 to have satisfied the requirement of inventiveness. Appellant failed to substantiate its claim that the formulation covered by Patent No. 20574 is not patentable since it is not inventive and is obvious to a person skilled in the art.[23] In order to be patentable, an alleged invention must only be new and useful, but it must also actually be an invention, as the word "invention" has been interpreted by the courts. If the concept involved in an alleged invention having regard to the state of the art, is obvious to a person having ordinary skill in the art at the time of the invention, there is no invention in the legal sense.[24]

If the invention would be obvious to a person having ordinary skill in the art to which the invention pertains, it cannot be patented. A person of 'ordinary skill' is neither a highly sophisticated expert or genius in the art nor a layperson with no knowledge of the field of art but rather some hypothetical person who is aware of the pertinent prior art. In determining whether an invention is non-obvious, consideration must be given to differences between the prior art and the invention at issue. Applicants themselves may include statements in their applications in regard to how their inventions differ from and are improvements over prior art. An invention that achieves superior results is likely not obvious.[25]

In this case, there is an improvement in Patent No. 20574 Patent No. 13540 in terms of stability and increased shelf life. According to the Director:

Therefore, Patent No. 20574 is a significant improvement over the prior art and warrants a finding of non-obviousness.

This Office yields to the observation of the Director that there is nothing in the 13540 patent sluggest that a pH of 6.5-7.5 would significantly increase the stability of the ranitidine solution. A reading of the claims and abstract mentions only about the formulation being at pH 5.0, and there is no teaching of increase stability at pH values higher than 5.0. The 13540 patent does not contain any proposition that would prompt a person skilled in the art to conduct an experiment

and adjust the pH in order to obtain increased shelf life of the formulation.[28] Moreover, the procedures by which the improved shelf life of the 20574 patent was achieve went beyond the usual pH profiling. Aptly, it involves assaying and determination of specific reaction rates relating to the decomposition of ranitidine up to a given limit. The adjustment of pH in order to achieve an increase shelf life appears to be an exercise of ability beyond that to be expected of a person skilled in the art. In other words, the tenfold increase in the stability of ranitidine is a "(s)uperior result that a person of ordinary skill in the art would have found surprising or unexpected."[29]

On the same note, the procedures by which the improved shelf life of the 20574 patent was achieved went beyond the usual pH profiling. This is to underscore the methodology and activities that took place before the inventors developed the 20574 patent. There were experiments and assaying of the results as well as application of equations and formulas to determine rate constants, all aimed at determining the conditions under which the patent would have the longest shelf life.[30] In other words, as correctly observed by the Director, the 20574 patent was not developed by simply pouring acid to a solution containing the 13540 patent and determining its pH at every drop of acid and then creating a pH profile out of that, making it a simple 'precursor' of the 13540 patent, as what Appellant would want this Office to hold. On the contrary, the evidence on record clearly suggest that the 20574 patent was inventive and non-obvious over the prior art.[31] It is worthwhile to note the explanation[32] given by the Appellee on why in the case of ranitidine hydrochloride, pH profiling cannot be considered routinary or conducted as a matter of course:

51. Moreover, there is persuasive jurisprudence to prove that one of ordinary skill would not have been persuaded to make a pH profile test on *ranitidine hydrochloride.* In yet another similar case decided in the United States by a court of a different jurisdiction, *Glaxo Wellcome, Inc. et al., v. Pharmadyne Corporation, et al., [24]* the patent involved therein were similar patents issued in favor of Glaxo regarding the same formulation subject of Letter Patent 20574. Similarly, the opposing party therein contended, among others, that the ordinary formulator would not have been surprised to discover that the optimum stability of *ranitidine hydrochloride* is reached within the pH range of 6.5 to 7.5, and that the pH profiles are conducted as a matter of course in pharmaceutical formulation development, hence, there was no inventive step involved.

52. The said U.S court, in disposing of the issue, differentiated between the characteristics of *amides* and *enamines*, ranitidine hydrochloride being an enamine. Thee evidence considered was that the reasctions that occur during amide hydrolysis result in a U or V-shaped curve, the infection point on the V-shaped curve or the plateau range in the U-shape curve being the point or range of highest stability, which result would lead one to discover that the optimum stability of amides is in the range of Ph 6.5-7.5. However as the U.S. court noted, enamines do not ordinary react in the same way. Thus:

…The ph profiles of enamines *ordinarily* are flat and reach a plateau in the broad pH range of 2-6…

…the pH profiles of the enamines represented in the diagram show that the stability of enamines is *relatively independent of pH…..*

The rate which is expressed on the Y axis versus pH is a linear horizontal line, saying that as pH changes, the rate showed no apparent [**100] change. Therefore, it's independent of pH.

The evidence establishes that the ordinary formulator would not have looked to the amide hydrolysis mechanism… Rather, understanding that ranitidine is an enamine would more likely have looked to enamine hydrolysis which shows a very different relationship of stability versus pH as established by Glaxo's graph. (Carstenses Tr. At 3466; Wray. At 4823-24)….[25]

53. The foreign court was therefore unconvinced in the argument, espoused by petitioner-Appellant in this case, that pH profiles are considered necessary, and hence, conducted, in *every* instance of formulation development. It eventually upheld the validity of the latter's patent, thus:

Based on these standards, as set forth below, I find that the claims of the '790 and '249 patents are not invalid for obviousness. Pharmadyne has failed to demonstrate by clear and convincing evidence that the references on which they rely "taken as a whole, would have suggested [Galxo's] invention to one of ordinary skill in the [pharmaceutical development arts at the same time the invention was made." *In re Merck & Co., Inc.,* 800 F2d 1091, 1097 (Fed. Cir. 1986).

Pharmadyne's evidence of obviousness must be clear and convincing. *American Hoist,* 725 F2d at 1358-60.[23] (Emphases added).

On issuance of Letters Patent No. 20574 creates a presumption that the Examiner made a thorough study thereof and made a thorough investigation of the available prior art relating to the subject matter of the invention sought to be patented, and that the examination is complete with respect both to compliance of the application with the statutes and rules and to the patentability of the invention as claimed, as well as with respect to matter of form.[33] Moreover, the function of determining whether or not an application for a patent should be allowed or denied under the facts disclosed in the application and in the reference by the Examiner and under the applicable law (statutory and decisional), is a quasi-judicial function and involves the exercise of judicial discretion.[34] Therefore, the presumption of the validity of the process in question must not be interfered with in the absence of competent evidence to the contrary.

WHEREFORE, premises considered, there is no cogent to disturb Decision No. 2003-12 dated 27 February 2003 rendered by the Director of the Bureau of Legal affairs. Accordingly, the instant appeal is DENIED and the appealed decision is hereby AFFIRMED.

Let a copy of this Decision be furnished the Director of the Bureau of Legal Affairs for appropriate action, and the petition for cancellation as well as the records be returned to her proper disposition. Further, let the Directors of the Bureau of Patents and the Administrative, Financial and Human Resource Development Service Bureau be furnished copies hereof for information and/or appropriate action.

SO ORDERED.

Makati City, Philippines, December 10, 2004

EMMA C. FRANCISCO
Director General

FOOTNOTES:

1A corporation organized and existing under and by virtue of the laws of the Republic of the Philippines and may be served with papers, processes, and orders of this Office through its agent representatives, Villaraza & Angangco, with address at 5th Floor, LTA Building, 188 Perea St. Legaspi Village, 1129 Makati City, Metro manila. See: Appellant's Appeal Memorandum dated 27 October 2003, page 2
2A foreign corporation duly organized and existing under the laws of the United Kingdom, which for purposes of this proceeding may be served with papers, processes and orders of this Office through its counsel Castillo Laman Tan Pantaleon & San Jose Law Offices, with office address at 2nd, 3rd and 4th Fllors, The Valero tower, 122 Valero St., Salcedo Village, Makati City, Metro Manila. See: Appellee's Answer dated 01 February 1999, page 1.
3Appellant's Petition for Cancellation of Letters Patent dated 26 June 1998, page 10-11.
4Appellee's Answer to Petition for Cancellation dated 01 February 1999, page 4,5 and 6.
5Appellant's Appeal Memorandum dated 27 October 2003, page 15.
6Appellant's Appeal Memorandum, infra.
7Appellant's Appeal memorandum, page 15-16
8Appellee's Comment dated 01 December 2003, page 9-10.
9Appellee's Answer dated 01 February 1999, page 5.
10 Decision No. 2003-12 dated 27 February February 2003, page 3; citing Alindao vs. Joscon, G.R No. 114132, 14 November 1996 and Asset Privatization Trust vs. CA, G.R. No. 103277, 03 February 1994.
11Decision No. 2003-12, supra.
12Appellee's Comment, supra, page 9.
13Manzano vs. Court of Appeals, 278 SCRA 688 (05 September 1997), emphasis supplied.
14Appellant's Appeal Memorandum, supra, page 15.

15Decision No. 2003-12, supra, page 7; citing Wegner, Patent Law in Biotechnology, Chemicals & Pharmaceuticals, 2nd ed., 1994, p. 159, citing W>L Gore & Associates, Inc. v. Garlock, Inc., 721 F. 2d 1540, 1554, 220 USPQ 303, 313, Fed. Cir. 1983, cert. Denied, 469 US 851 (1984).
16Decision, infra; citing Wegner, Patent Law in Biotechnology, Chemicals & Pharmaceuticals, 2nd ed., 1994, p. 159-160. Resolution No. 2003-11 (D) dated 30 September 2003, page 2.
17Appellant's Appeal Memorandum, supra, page 18.
18Decision, supra, page 8.
19Resolution No. 2003-11 (D) dated 30 September 2003, page 2
20Appellant's Appeal Memorandum, supra, page 17-18
21Decision, supra, page 8: "Indeed, since it is provided in page 65 of the abstract of the 13540 patent an injection for intravenous administration containing 2000 mg. ranitidine in 2 ml. solution has a composition of 10% ranitidine by weight, based on the following computation for weight rations:

$$\frac{\text{200 mg. ranitidine (1 g. / 1000 mg.)}}{\text{2 ml. solution (1 g./ 1 ml.)}} \times 100\% = 10\%$$

Appellant appears to have arrived at the figure 99.0099% ranitidine by weight using the formula:

$$\frac{\text{Wt. of ranitidine+ wt. of water}}{\text{Wt. ranitidine + wt. water}} \text{ or } \frac{\text{200 mg.}}{\text{200 mg. + 2 mg.}} \times 100 = 99.0099\%$$

which result, however, is incorrect since a 2 ml. solution that is mostly composed of water has a density of 1g./1ml., and therefore has weight of 2000 mg. Had Appellant used the correct conversion values, it would have arrived at the following:

$$\frac{\text{200 mg. ranitidine}}{\text{2000 mg. solution (water and ranitidine)}} \times 100 = 10.0\ \%$$

which result is the same as the figure provided in page 65 of the abstract of the 13540 patent."

22Resolution, supra, page 2; citing WIPO Intellectual Property Handbook, 2001, page 19.
23Appellant's Appeal Memorandum, supra, page 23
24Riles of Practice in Patent Cases, Part II, Chapter I, Rule 34.
25Decision, supra, page 11; citing Bounchox, Deborah E., Intellectual Property: The Law of Trademakers, Copyrights, Patents and Trade secrets, 2000 ed., p. 263-264.
26Decision, supra, page 11-12.
27Decision, supra.
28Decision, supra, page 12.
29Decision, supra; citing In Re Micheal Geisler, Rudolf Kotter-Faulhaber, Suzane Wuerz and Micheal Jung, United States Court of Appeals for the Federal Circuit, 96-1362 (Serial No. 07/898,381), decided July 17, 1997.
30Resolution, supra, page 3; citing paragraphs 6, 9, 11, 12, 14, 16 of Padfield's declaration contained in the file wrapper of the 20574 patent.
31Resolution, intra, page 3.
32Appellee's Memorandum dated 15 December 2003pages 16, 17, 18.
33Rules of Practice in Patent Cases, Part III, Chapter II, Rule 87 (a)
34Rules of Practice in Patent Cases, Part X , Chapter I, Rule 254.