CLAIMS 1, 2, 11-13, 22-26, 30-33, 35, 37, 39, 41, 43, 45, 47 AND 49 ARE PRESENTED FOR EXAMINATION

Applicants' Amendment and Information Disclosure Statement filed December 8, 2004 have been received and entered into the application.

Accordingly, claims 1, 2, 11-13, 22-26, 30-33, 35, 37, 39, 41, 43, 45, 47 and 49 have been amended and claims 8-10, 18, 55-58 and 60-62 have been canceled. Also, as reflected by the attached, completed copy of form PTO-1449 (15 pages), the Examiner has considered the cited references.

In view of the above amendments, and the remarks by Applicants at pages 7-8 of their amendment, the objections and rejections set forth in the previous Office action dated September 8, 2004 are withdrawn.

Upon further review of the claims as well as a consideration of the state of the art as represented by the references newly cited by Applicants, the following new objection and claim rejection under 35 U.S.C. § 112, first paragraph are deemed proper.

Allowable Claims

Claims 12 and 13 are in condition for allowance.

Claim Objection

Claim 1 is objected to as containing a grammatical error. The expression "stabilize/reduce/iron accumulation" at lines 4-5 should read as ---stabilize/reduce iron accumulation---. Appropriate correction is required.

Claim Rejection - 35 USC § 112, First Paragraph

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1, 2, 11, 23-26, 30-33, 35, 37, 39, 41, 43, 45, 47 and 49 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for treating, stabilizing or reducing/stabilizing the risk of iron-induced cardiac disease through the administration of deferiprone or a physiologically acceptable salt thereof, does not reasonably provide enablement for the prevention or reversal of such disease. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to practice the invention commensurate in scope with these claims.

Burden on the Examiner for Making a Rejection Under 35 U.S.C. § 112 First Paragraph

As set forth in *In re Marzocchi*, 169 USPQ 367, 370 (CCPA 1971):

"[A] [s]pecification disclosure which contains teaching of manner and process of making and using the invention in terms corresponding to the scope to those used in describing and defining subject matter sought to be patented must be taken as in compliance with enabling requirement of first paragraph of 35 U.S.C. 112 *unless there is reason to doubt the objective truth of statements contain therein which must be relied on for enabling support*; assuming that sufficient reason for such doubt exists, a rejection for failure to teach how to make and/or use will be proper on that basis, such a rejection can be overcome by suitable proofs indicating that teaching contained in specification is truly enabling." (emphasis added).

Here, the objective truth of the statement that iron-induced cardiac disease could be prevented or reversed is doubted because the "prevention" or "reversal" of iron-induced cardiac disease is tantamount to a cure for such disease, while the art (see the references relied upon

infra) and Applicants teach that, at best, iron-induced cardiac disease may be effectively treated through the administration of the claimed active agent. Also, the state of the art concerning the treatment of iron-induced cardiac disease with chelation therapy appeared to be that some degree of cardiac disease would occur. Support for this conclusion is Applicants' statement at page 34 of the present specification, lines 26-29 "Although effective iron chelation with desferrioxamine has been available for over 25 years, cardiac disease remains a frequent cause of morbidity and is still responsible for 70% of the deaths among patients with transfusion-dependent thalassemia patients (sic)."

It is noted that prevention and reversal do not necessarily equate to the term "cure". However, such is a proper interpretation because it is broad and reasonable as provided for in the MPEP at section 2111. ("Claims must be given their broadest reasonable interpretation consistent with the supporting description").

A prevention, reversal of or cure for iron-induced cardiac disease each circumscribe methods of absolute success. Absolute success is not reasonably possible with most diseases/disorders and more than a mere allegation that deferiprone is effective for preventing or reversing iron-induced cardiac disease would be necessary to satisfy the enabling requirement in the face of the doubt expressed by the Examiner which is based on the state of the art at the time of the invention.

Concerning the state of the art of treating iron-induced heart cardiac disease, Applicants have set forth in their response filed August 23, 2004 at page 19, last full sentence that "The data reveals that iron induced heart disease occurs even in patients who are compliant with desferroxamine and even for those who do not have high levels of total body iron assessed by

serum ferretin or liver iron concentrations."(emphasis original). This statement satisfies the Examiner's burden of doubt as expressed in *In re Marzocchi*, *Id.* as such establishes the difficulty known to the skilled artisan in the mere treatment of the disease. Logic would dictate that if such difficulty is encountered while trying to manage the disease while it exists in a patient, the prevention or reversal of such a disease, where absolute success would need to be demonstrated, would be therapeutic goals not readily or reasonably expected by the skilled artisan. In order to imbue the artisan with at least a reasonable expectation that the prevention or reversal of iron-induced cardiac disease could be obtained through the mere administration of deferiprone or a physiologically acceptable salt thereof, the artisan would need to review clinical data where such prevention or reversal was shown. Because such data is lacking in the present specification, and the Examiner cannot locate data showing such prevention or reversal, it is the Examiner's position that the artisan would not be enabled to practice the present invention in a manner commensurate in scope with the claims, which include both the prevention and reversal of iron-induced cardiac disease. The reference cited by Applicants, Liu, P. "Personal letter from Dr. Liu on reversal of the heart failure in a patient with thalassemia treated with deferiprone" (cited on page 8 of form PTO-1449) is noted in this regard, but is insufficiently detailed to diminish the propriety of the Examiner's position. That is, a determination of whether a cardiac disease was, in fact, reversed, would involve consideration of more than just an anecdotal report of normal ventricular function.

It is noted that claims 1-2 are not directed to the prevention or reversal of iron-induced cardiac disease. The claims do, however, include the requirement that "further iron accumulation in the heart" is prevented. It is doubted that such accumulation could actually be

prevented, i.e., no iron whatsoever accumulating in the heart following the initiation of deferiprone therapy, because therapy with a related drug, i.e., desferroxxamine, was not known to be totally effective in removing iron-induced cardiac disease in patients who are compliant with therapy (see Applicants' remarks relied on above, i.e., "The data reveals...") and because the cardiac disease is characterized as "iron induced", it may be reasonably presumed that some level of iron would continue to accumulate so as to further contribute to the disease.

Further supporting the Examiner's doubt as to the accuracy of Applicants' statements that iron-induced cardiac disease may be prevented or reversed through the administration of deferiprone or a physiologically acceptable salt thereof are the following statements which appear to indicate the efficacy of deferiprone in only reducing the risk of such disease, rather than actually preventing or reversing the disease:

"Applicant's (sic) have discovered that the administration of effective amounts of deferiprone results in patients being *at less risk of developing cardiac disease* than a patient treated with desferroxamine."(emphasis added) (Applicants' amendment filed August 23, 2004 at page 20, middle of the second paragraph); and

"This specification teaches an even greater *protective effect* than could be expected from overall body iron reduction alone." (emphasis added) (Applicants' amendment filed August 23, 2004 at page 20, third full paragraph).

Also, the data in the present specification at pages 22-39 has also been noted, but does not demonstrate that the administration of deferiprone resulted in the prevention or reversal of iron-induced cardiac disease. The statement that "the successful reversal of the iron-induced congestive heart failure in a patient participating in the study provides evidence for the

cardioprotective effect of this iron chelator" references the above mentioned Liu, P. "Personal letter from Dr. Liu on reversal of the heart failure in a patient with thalassemia treated with deferiprone" reference (cited on page 8 of form PTO-1449). This anecdotal report fails to establish, however, that the heart disease, was in fact, "reversed". The reference does not provide objective data upon which the author's opinion is based and it is further not believed that the results demonstrated in but a single patient provides meaningful information upon which to base a reasonable conclusion respecting the efficacy of deferiprone on iron-induced cardiac disease.

Summary

As the cited art and discussion above establish, practicing the claimed method in the manner disclosed by Applicants would not imbue the skilled artisan with a reasonable expectation that the iron-induced cardiac disease could be prevented or reversed or that iron accumulation in the heart could be prevented, i.e., no accumulation of iron whatsoever. In order to actually achieve these objectives, it is clear from the discussion above that the skilled artisan could not rely on Applicant's disclosure as required by 35 U.S.C. § 112, first paragraph. Given that the art fails to recognize, and Applicants have failed to demonstrate, that iron-induced cardiac disease could actually be prevented or reversed, the skilled artisan would be faced with the impermissible burden of undue experimentation in order to practice this embodiment of the claimed invention.

Accordingly, the claims are deemed properly rejected.

Claim Rejection - 35 USC § 112, Second Paragraph

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 22-24, 30-33, 35, 37, 39, 41, 43, 45, 47 and 49 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

"The primary purpose of this requirement of definiteness of claim language is to ensure that the scope of the claims is clear so the public is informed of the boundaries of what constitutes infringement of the patent. A secondary purpose is to provide a clear measure of what applicants regard as the invention so that it can be determined whether the claimed invention meets all the criteria for patentability and whether the specification meets the criteria of 35 U.S.C. 112, first paragraph with respect to the claimed invention." (MPEP 2173).

The phrase "less critical" in the expression "less critical organs/tissue in the body" (claims 22-24) and "substantially" in the expression "substantially in the range of..." (claims 35, 37 and 39) are relative terms which renders the claim indefinite. The phrase "less critical" and "substantially" are not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and thus one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

The terms "less critical" and "substantially" would invite subjective interpretations of whether or not a particular dosage amount of deferiprone or a physiologically acceptable salt thereof is included by or excluded from the present claims and it is thus the Examiner's position that the public would not be informed of the boundaries of what constitutes infringement of the present claims. Therefore, the claims fail to meet either the tenor or express requirements of 35 U.S.C. § 112, second paragraph and are properly rejected.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond J. Henley III whose telephone number is 571-272-0575. The examiner can normally be reached on M-F, 8:30 am to 4:00 pm Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Low can be reached on 571-272-0951. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Raymond J Henley III
Primary Examiner
Art Unit 1614

March 22, 2005

Interview Summary	Application No. 10/311,814	Applicant(s) SPINO ET AL.	
	Examiner Raymond J. Henley III	Art Unit 1614	

All participants (applicant, applicant's representative, PTO personnel):

(1) *Raymond J. Henley III*. (3)_____.

(2) Neil H. Hughes (4)_____.

Date of Interview: *01 December 2004*.

Type: a)☒ Telephonic b)☐ Video Conference
c)☐ Personal [copy given to: 1)☐ applicant 2)☐ applicant's representative]

Exhibit shown or demonstration conducted: d)☐ Yes e)☒ No.
If Yes, brief description: _____.

Claim(s) discussed: *All, generally*.

Identification of prior art discussed: *None*.

Agreement with respect to the claims f)☒ was reached. g)☐ was not reached. h)☐ N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: *If all objections/rejections are overcome, the application should be in condition for allowance.*.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN ONE MONTH FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.

Examiner's signature, if required

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record
A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews
Paragraph (b)
In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.
All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:
- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:
1) A brief description of the nature of any exhibit shown or any demonstration conducted,
2) an identification of the claims discussed,
3) an identification of the specific prior art discussed,
4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
5) a brief identification of the general thrust of the principal arguments presented to the examiner,
   (The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
6) a general indication of any other pertinent matters discussed, and
7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

CITATION OF PRIOR ART

FORM PTO-1449 (REV. 8-83) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. PC-1834033	APPLICATION SERIAL NO. 10/311,814
INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)	APPLICANT Apotex Inc.	
CUSTOMER NO. 23607	FILING DATE 04/04/2003	GROUP ART UNIT 1614

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES	TRANSLATION NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

	Gabutti V, Piga A. Results of Long-Term Iron-Chelating Therapy. Acta Haematol 1996; 95:26-36.
	Wolfe LC, Olivieri NF, Sallan D, Colan S, Rose V, Propper RD et al. Prevention of cardiac disease by subcutaneous desferrioxamine in patients with thalassemia major. N Engl J Med 1985; 312(25): 1600-1603.
	Aldouri MA, Wonke B. Hoffbrand AV, Flynn DM, Ward SE, Agnew JE et al. High Incidence of Cardiomyopathy in Beta-Thalassemia Patients Receiving Regular Transfusion and Iron Chelation: Reversal by Intensified Chelation. Acta Haematol 1990; 84:113-117.
	Brittenham GM, Griffith PM, Nienhuis AW, McLaren CE, Young NS, Tucker EE et al. Efficacy of Desferrioxamine in Preventing Complications of Iron Overload in Patients with Thalassemia Major. N Engl J Med 1994; 331(9):567-573.
	Giardina PJV, Ehlers KH, Engle MA, Grady RW, Hilgartner MW. The Effect of Subcutaneous Desferrioxamine on the Cardiac Profile of Thalassemia Major: A Five-Year Study. Ann N Y Acad Sci 1985; 445:282-292.
	Borgna-Pignatti C, Rugologgo S, DeStefano P, Piga A, et al. Survival and Disease Complications in Thalassemia Major. Ann N Y Acad Sci 1998; 850:227-231.

EXAMINER	DATE CONSIDERED
	3/22/05

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

CITATION OF PRIOR ART

FORM PTO-1449 (REV. 8-83) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. PC-1834033	APPLICATION SERIAL NO. 10/311,814
INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)	APPLICANT Apotex Inc.	
CUSTOMER NO. 23607	FILING DATE 04/04/2003	GROUP ART UNIT 1614

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES	TRANSLATION NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

		Olivieri NF, Nathan DG, MacMillan JH, Wayne AS, Liu P, McGee A et al. Survival in Medically Treated Patients with Homozygous Beta-Thalassemia. N Engl J Med 1994; 331(9):574-578.
		Addis A, Loebstein R, Koren G, Einarson TR. Meta-analytic review of the clinical effectiveness of oral deferiprone (Deferiprone). Eur J Clin Pharmacol 1999; 55:1-6.
		Grady RW, Hilgartner MW, Giardina PJV. Deferiprone: Its Effectiveness Relative to that of Desferrioxamine. 6th International Conference on Thalassemia and the Haemoglobinopathies, Abstract #2. 1997.
		Olivieri NF, Brittenham GM, Armstrong SAM, Basran RK, Daneman R, Daneman N et al. First Prospective Randomized Trial of the Iron Chelators Deferiprone (Deferiprone) and Deferoxamine. Blood 86[10 Suppl. 1], 249a. 1995.

EXAMINER	DATE CONSIDERED
	3/22/05

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

CITATION OF PRIOR ART

FORM PTO-1449 (REV. 8-83) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. PC-1834033	APPLICATION SERIAL NO. 10/311,814
INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)	APPLICANT Apotex Inc.	
CUSTOMER NO. 23607	FILING DATE 04/04/2003	GROUP ART UNIT 1614

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES	TRANSLATION NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

		Olivieri NF, Belluzzo N, Muraca M, MacKenzie CC, Milone S, Polsinelli K et al. Evidence of Reduction in Hepatic, Cardiac and Pituitary Iron Stores in Patients with Thalassemia Major During Long-Term Therapy with the Orally Active Iron Chelating Agent Deferiprone. Blood 84[10 Suppl. 1], 109a. 1994.
		Link G, Konijin AM, Hershko C. Cardioprotective effect of alpha-tocopherol, ascorbate, desferrioxamine, and deferiprone: mitochondrial function in cultured, iron-loaded heart cells. J Lab Clin Med 1999; 133: 179-188.
		De Franceschi L, Shalev O, Piga A, Collell M, Olivieri O, Corrocher R et al. Deferiprone therapy in homozygous human beta-thalassemia removes erythrocyte membrane free iron and reduces KCI contransport activity. J Lab Clin Med 1999; 133:64-69.
		Carthew P, Smith AG, Hider RC, Dorman B, Edwards RE, Francis JE. Potentiation of iron accumulation in cardiac myocytes during the treatment of iron overload in gerbils with the hydroxypridinone iron chelator CP94. Biometals 1994; 7:267-271.

EXAMINER	DATE CONSIDERED
	3/22/05

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

CITATION OF PRIOR ART

FORM PTO-1449 (REV. 8-83) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. PC-18340B3	APPLICATION SERIAL NO. 10/311,814
INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)	APPLICANT Apotex Inc.	
CUSTOMER NO. 23607	FILING DATE 04/04/2003	GROUP ART UNIT 1614

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES	TRANSLATION NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

		Hider RC, Kayyli R, Evans P, Mackinnon S. The production of Hydroxyl Radicals by Deferiprone-iron compounds under physiological conditions. Blood 94[10], 406a. 1999.
		Engle MA, Erlandson M, Smith CH. Late Cardiac Complications of Chronic, Severe, Refractory Anemia with Hemochromatosis. Circulation 1964; 30:698-705.
		The Criteria Committee of the New York Heart Association. Nomenclature and Criteria for Diagnosis of Disease of the heart and Great Vessels. 9th ed. Boston, Mass; Little, Brown & Co; 1994:253-255.
		Sirchia G, Zanella A. A Short Guide to the Management of Thalassemia. Thalassemia Today: the Mediterranean Experience. 1987: 635-670.

EXAMINER	DATE CONSIDERED
	3/22/05

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

CITATION OF PRIOR ART

FORM PTO-1449 (REV. 8-83) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. PC-1834033	APPLICATION SERIAL NO. 10/311,814
INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)	APPLICANT Apotex Inc.	
CUSTOMER NO. 23607	FILING DATE 04/04/2003	GROUP ART UNIT 1614

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES	TRANSLATION NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

		Hider RC, Kayyli R, Evans P, Mackinnon S. The production of Hydroxyl Radicals by Deferiprone-iron compounds under physiological conditions. Blood 94[10], 406a. 1999.
		Engle MA, Erlandson M, Smith CH. Late Cardiac Complications of Chronic, Severe, Refractory Anemia with Hemochromatosis. Circulation 1964; 30:698-705.
		The Criteria Committee of the New York Heart Association. Nomenclature and Criteria for Diagnosis of Disease of the heart and Great Vessels. 9th ed. Boston, Mass; Little, Brown & Co; 1994:253-255.
		Sirchia G, Zanella A. A Short Guide to the Management of Thalassemia. Thalassemia Today: the Mediterranean Experience. 1987: 635-670.

EXAMINER	DATE CONSIDERED
	3/22/05

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

CITATION OF PRIOR ART

FORM PTO-1449 (REV. 8-83) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. PC-1834033	APPLICATION SERIAL NO. 10/311,814
INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)	APPLICANT Apotex Inc.	
CUSTOMER NO. 23607	FILING DATE 04/04/2003	GROUP ART UNIT 1614

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES	TRANSLATION NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

		Berdoukas V, Bohans T. The Effect of Liver Iron on Cardiac Function. 10th International Conference on Oral Chelators in the treatment of Thalassemia and other diseases and Biomed Meeting 10, 13. 2000.
		Hershko C, Graham G, Bates GW, Rachmilewitz EA. Non-Specific Serum Iron in Thalassemia: an Abnormal Serum Iron Fraction of Potential Toxicity. Br J Haematol 1978; 40: 255-263.
		Olivieri NF, Koren G, Matsui D, Liu P, Blendis L, Cameron R et al. Reduction of Tissue Iron Stores and Normalization of Serum Ferritin During Treatment with the Oral Iron Chelator Deferiprone in Thalassemia Intermedia. Blood 1992; 79(10):2741-2748.
		Al-Refaie FN, Sheppard L, Nortey P, Wonke B, Hoffbrand AV. Pharmacokinetics of the Oral Iron Chelator Deferiprone (Deferiprone) in Patients with Iron Overload. Br J Haematol 1995; 89:403-408.

EXAMINER	DATE CONSIDERED
[signature]	3/22/05

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

CITATION OF PRIOR ART

FORM PTO-1449 (REV. 8-83) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. PC-1834033	APPLICATION SERIAL NO. 10/311,814
INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)	APPLICANT Apotex Inc.	
CUSTOMER NO. 23607	FILING DATE 04/04/2003	GROUP ART UNIT 1614

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES	TRANSLATION NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

		Novartis Marketing Brochure on Desferal (Desferrioxamine). 1998. Switzerland, Novartis Pharma AG.
		Grady RW, Berdoukas VA, Rachmilewitz EA, Giardina PJ. Combining Deferiprone and Desferrioxamine to optimize Chelation. 10th International Conference on Oral Chelators in the treatment of Thalassemia and other diseases and Biomed Meeting, Limassol, Cyprus Page 9. March 2000.
		Töndury P, Zimmermann A, Nielsen P, Hirt A. Liver iron and fibrosis during long-term treatment with deferiprone in Swiss thalassaemic patients. Br. J. Haematol. 1998;101(3):413-5.
		Olivieri NF, Brittenham GM, McLaren CE, Templeton DM, Cameron RG, McClelland RA et al. Long-term safety and effectiveness of iron-chelation therapy with deferiprone for thalassemia major. N Engl J Med 1998; 339(7):417-423.

EXAMINER	DATE CONSIDERED
	3/22/05

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

CITATION OF PRIOR ART

FORM PTO-1449 (REV. 8-83) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. PC-1834033	APPLICATION SERIAL NO. 10/311,814
INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)	APPLICANT Apotex Inc.	
CUSTOMER NO. 23607	FILING DATE 04/04/2003	GROUP ART UNIT 1614

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES	TRANSLATION NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

		Hoffbrand AV, Al-Refaie FN, Davis B, Siritanakatkul N, Jackson BFA, Cochrane J et al. Long-Term Trial of Deferiprone in 51 Transfusion-Dependent Iron Overloaded Patients. Blood 1998; 91(1):295-300.
		Olivieri NF, Butany J, Templeton DM, Brittenham GM. Cardiac Failure and Myocardial Fibrosis in a patient with Thalassemia Major (TM) Treated with Long-Term Deferiprone. Blood 92[10 (Suppl 1)], 532a. 1998.
		Cohen AR, Galanello R, Piga A, DiPalma A, Vullo C, Tricta F. Safety profile of the oral iron chelator deferiprone: a multicentre study. Br J Haematol 2000; 108:305-312.
		Agarwal MB, Rajadhyaksha G, Munot S. Deferiprone: A report of 22 patients who have taken it for over a decade. 10th International Conference on Oral chelators in the Treatment of Thalassemia and other Diseases and Biomed Meeting, Limassol, Cyprus, Page 3. March 2000.
		Liu P. Personal letter from Dr. Liu on reversal of the heart failure in a patient with thalassemia treated with deferiprone. May 13, 1996.

EXAMINER	DATE CONSIDERED
	3/22/05

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

CITATION OF PRIOR ART

FORM PTO-1449 (REV. 8-83) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. PC-1834033	APPLICATION SERIAL NO. 10/311,814
INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)	APPLICANT Apotex Inc.	
CUSTOMER NO. 23607	FILING DATE 04/04/2003	GROUP ART UNIT 1614

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES	TRANSLATION NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

		Ramm GA, Britton RS, Brunt EM, O'Neill R, Bacon BR. Hepatic iron overload in pathogen-free gerbils does not result in bridging fibrosis or cirrhosis. Bioiron'99, P. 327. 1999.
		Hershko C., Link G., Konijn A. M. Relative effectiveness of desferrioxamine and deferiprone in protecting iron-loaded Gerbils from non-transferrin bound iron (NTBI) toxicity. Blood 94 (10): 422a; 1999.
		Porter JB. Evaluation of New Iron Chelators for Clinical Use. Acta Haematol 1996; 95:13-25.
		Al-Refaie FN, Hershko C, Hoffbrand AV, Kosaryan M, Olivieri NF, Töndury P et al. Results of Long-Term Deferiprone (Deferiprone) Therapy: A Report by the International Study Group on Oral Iron Chelators. Br J Haematol 1995; 91:224-229.
		G. Link, A. Pinson, and C. Hershko. Ability of the orally effective iron chelators dimethyl- and diethyl-hydroxypyrid-4-one and of deferoxamine to restore sarcolemmal thiolic enzyme activity in iron-loaded heart cells. *Blood* 83 (9):2692-2697, 1994.

EXAMINER	DATE CONSIDERED
[signature]	3/22/05

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

CITATION OF PRIOR ART

FORM PT0-1449 (REV. 8-83) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. PC-1834033	APPLICATION SERIAL NO. 10/311,814
INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)	APPLICANT Apotex Inc.	
CUSTOMER NO. 23607	FILING DATE 04/04/2003	GROUP ART UNIT 1614

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES	TRANSLATION NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

		J. B. Porter, K. P. Hoyes, R. D. Abeysinghe, P. N. Brooks, E. R. Huehns, and R. C. Hider. Comparison of the Subacute Toxicity and Efficacy of 3-Hydroxypyridin-4-One Iron Chelators in Overloaded and Nonoverloaded Mice. *Blood* 78 (10):2727-2734, 1991.
		G. R. Gale, W. H. Litchenberg, A. B. Smith, P. K. Singh, R. A. Campbell, and M. M. Jones. Comparative iron mobilizing actions of deferoxamine, 1,2- dimethyl-3-hydroxypyrid-4-one, and pyridoxal isonicotinoyl hydrazone in iron hydroxamate-loaded mice. *Res.Commun.Chem.Pathol.Pharmacol.* 73 (3):299-313, 1991.
		C. Hershko, G. Link, A. Pinson, H. H. Peter, P. Dobbin, and R. C. Hider. Iron Mobilization From Myocardial Cells by 3-Hydroxypyridin-4-One Chelators: Studies in Rat Heart Cells in Culture. *Blood* 77 (9):2049-2053, 1991.
		M. van der Kraaij, H. G. Van Eijk, and J. F. Koster. Prevention of postischemic cardiac injury by the orally active iron chelator 1,2-dimethyl-3-hydroxy-4-pyridone (L1) and the antioxidant (+)-cyanidanol-3. *Circulation* 80 (1):158-164, 1989.
		Y. Aydinok, G. Nisli, K. Kavakli, C. Coker, M. Kantar, and N. Cetingul. Sequential use of deferiprone and desferrioxamine in primary school children with thalassaemia major in Turkey. *Acta Haematol.* 102 (1):17-21, 1999.

EXAMINER	DATE CONSIDERED
	3/22/05

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

CITATION OF PRIOR ART

FORM PTO-1449 (REV. 8-83) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. PC-1834033	APPLICATION SERIAL NO. 10/311,814
INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)	APPLICANT Apotex Inc.	
CUSTOMER NO. 23607	FILING DATE 04/04/2003	GROUP ART UNIT 1614

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES	TRANSLATION NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

		G. Faa and G. Crisponi. Iron chelating agents in clinical practice. *Coordination Chemistry Reviews* 184:291-310, 1999.
		D. Kaul and S. Venkataram. Sustained release tablet formulation for a new iron chelator. *Drug Dev.Indust.Pharm.* 18 (9):1023-1035, 1992.
		M. A. Barradas, J. Y. Jeremy, G. J. Kontoghiorghes, D. P. Mikhailidis, A. V. Hoffbrand, and P. Dandona. Iron chelators inhibit human platelet aggregation, thromboxane A2 synthesis and lipoxygenase activity. *FEBS Lett.* 245 (1,2):105-109, 1989.
		Maria Stearns.Drug for Iron Overload Passes Major Safety Hurdle; May Benefit Patients with Thalassemia and Other Blood Disorders. *1995-2000 ScienceDaily Magazine.*
		Nancy F. Olivieri and Gary M. Brittenham. Long-Term Trials of Deferiprone in Cooley's Anemia. *The Departments of Medicine and Pediatrics The Hospital for Sick Children, Division of Hematology, University of Toronto, Canada (N.F.O.) Sept. 27, 1999.*

EXAMINER	DATE CONSIDERED
	3/22/05

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

CITATION OF PRIOR ART

FORM PTO-1449 (REV. 8-83) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. [illegible]4033	APPLICATION SERIAL NO. 10/311,814
INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)	APPLICANT Apotex Inc.	
CUSTOMER NO. 23607	FILING DATE 04/04/2003	GROUP ART UNIT 1614

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES	TRANSLATION NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

		N. F. Olivieri and G. Brittenham. Long-Term Trials of Deferiprone in Cooley's Anemia. *Ann.N.Y.Acad.Sci.* 80:217-222, 1998.
		Kontoghiorghes GJ, Aldouri MA, Sheppard L, Hoffbrand AV. 1,2-Dimethyl-3-hydroxypyrid-4-one, an orally active chelator for treatment of iron overload. Lancet. 1987 Jun 6;1(8545):1294-5
		Nathan DG. An orally active iron chelator. N Engl J Med. 1995 Apr 6;332(14):953-4.
		Olivieri NF, Brittenham GM, Matsui D, Berkovitch M, Blendis LM, Cameron RG, McClelland RA, Liu PP, Templeton DM, Koren G. Iron-chelation therapy with oral deferiprone in patients with thalassemia major. N Engl J Med. 1995 Apr 6;332(14):918-22.
		Biochimica et biophysica acta molecular basis of disease. v1500 n3 (Mar 17, 2000) : p342-348. (Please note this reference is the same as *Biochimica et biophysica acta molecular basis of disease;* V.1500; No. 3; March 17/00; pp 342-348 - (Reference 59)).

EXAMINER	DATE CONSIDERED
[signature]	3/22/05

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

CITATION OF PRIOR ART

FORM PTO-1449 (REV. 8-83) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. PC-1834033	APPLICATION SERIAL NO. 10/311,814
INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)	APPLICANT Apotex Inc.	
CUSTOMER NO. 23607	FILING DATE 04/04/2003	GROUP ART UNIT 1614

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES	TRANSLATION NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

		Cohen AR, Martin MB. Iron chelation with oral deferiprone in patients with thalassemia. N Engl J Med. 1998 Dec 3;339(23):1713-4.
		Grady RW, Giardina PJ. Iron chelation with oral deferiprone in patients with thalassemia. N Engl J Med. 1998 Dec 3;339(23):1712-3.
		Wonke B, Telfer P, Hoffbrand AV. Iron chelation with oral deferiprone in patients with thalassemia. N Engl J Med. 1998 Dec 3;339(23):1712.
		Stella M, Pinzello G, Maggio A. Iron chelation with oral deferiprone in patients with thalassemia. N Engl J Med. 1998 Dec 3;339(23):1712.
		Callea F. Iron chelation with oral deferiprone in patients with thalassemia. N Engl J Med. 1998 Dec 3;339(23):1710-1.

EXAMINER	DATE CONSIDERED
[signature]	3/22/05

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

CITATION OF PRIOR ART

FORM PTO-1449 (REV. 8-83) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. PC-1834033	APPLICATION SERIAL NO. 10/311,814
INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)	APPLICANT Apotex Inc.	
CUSTOMER NO. 23607	FILING DATE 04/04/2003	GROUP ART UNIT 1614

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES	TRANSLATION NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

		Tricta F, Spino M. Iron chelation with oral deferiprone in patients with thalassemia. N Engl J Med. 1998 Dec 3;339(23):1710.
		Hershko C., Link G., and Ioav C.. Pathophysiology of Iron Overload. *Ann.N.Y.Acad.Sci.* 850:191-201, 1998.
		Mumby, S., Chaturvedi, R.R., Brierley, J., Lincoln, C., Petros, A., Redington, A.N., Gutteridge, J.M.C.. Iron overload in paediatrics undergoing cardiopulmonary bypass. Biochimica et biophysica acta molecular basis of disease: v1500 n3 (Mar 17, 2000): p342-348
		Y. Tung, F. J. Farrell, T. M. McCashland, R. G. Gish, B. R. Bacon, E. B. Keeffe, and K. V. Kowdley. Long-term follow-up after liver transplantation in patients with hepatic iron overload. *Liver Transpl.Surg.* 5:369-374, 1999.
		Telfer PT, Prestcott E, Hoden S, Walker M, Hoffbrand AV, Wonke B. Hepatic iron concentration combined with long-term monitoring of serum ferritin to predict complicaitons of iron overload in thalassaemia major [In Process Citation]. Br J Haematol 2000; 110(4):971-977.
		Wonke B, Anderson L, Pennell D.J. Iron Chelation Treatment Based on Magnetic Resonance Imaging (MRI) in B-Thalassaemia Major. [Abstract] 11th International Conference on Oral Chelation, Catania, Italy, Pages 61-65, 2001.

EXAMINER	DATE CONSIDERED
	3/22/05

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

CITATION OF PRIOR ART

FORM PTO-1449 (REV. 8-83) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. PC-1834033	APPLICATION SERIAL NO. 10/311,814
INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)	APPLICANT Apotex Inc.	
CUSTOMER NO. 23607	FILING DATE 04/04/2003	GROUP ART UNIT 1614

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES	TRANSLATION NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

		Diav-Citrin et al., 1997, Oral iron chelation with Deferiprone, Clinics of North America, (1997 Feb) 44 (1) 235-47. Ref. 75,XP001030553
		Gabriella Link et al., Cardioprotective effect of α-tocopherol, ascorbate, deferoxamine, and deferiprone: Mitochondrial function in cultered, iron-loaded heart cells, J. Lab Clin. Med., 133(2), p. 179-183
		B. Wonke et al., Combined Therapy with Deferiprone and Desferrioxamine, British Journal of Haematology, 103, P361-183
		Orna Diav-Citrin et al., Oral Iron Chelation with Deferprone, New Frontiers in Pediatric Drug Therapy, 44(1) P235-247

EXAMINER	DATE CONSIDERED
	3/22/05

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Index of Claims

Application No.	Applicant(s)
10/311,814	SPINO ET AL.
Examiner	**Art Unit**
Raymond J. Henley III	1614

√	Rejected	–	(Through numeral) Cancelled	N	Non-Elected	A	Appeal
=	Allowed	+	Restricted	I	Interference	O	Objected

Claim Final	Claim Original	Date 2/3/04	Date 9/2/04	Date 3/22/05
	1	✓	✓	=
	2	✓	✓	✓
	3			
	4			
	5			
	6			
	7	✓	✓	
	8	|	|	
	9	|	|	
	10	|	|	
	11	|	|	✓
	12	|	|	=
	13	✓	✓	=
	14			
	15			
	16			
	17			
	18	✓	✓	
	19			
	20			
	21			
	22	✓	✓	✓
	23	|	|	✓
	24	|	|	|
	25	|	|	|
	26	✓	✓	✓
	27			
	28			
	29			
	30	✓	✓	✓
	31	|	|	|
	32	|	|	|
	33	✓	✓	✓
	34			
	35	✓	✓	✓
	36			
	37	✓	✓	✓
	38			
	39	✓	✓	✓
	40			
	41	✓	✓	✓
	42			
	43	✓	✓	✓
	44			
	45	✓	✓	✓
	46			
	47	✓	✓	✓ ✓
	48			
	49	✓	✓	✓
	50			

Claim Final	Claim Original	Date 2/3/04	Date 9/2/04
	51	✓	
	52	|	
	53	|	
	54	|	
	55	|	✓
	56	|	✓
	57	|	✓
	58	|	✓
	59	|	
	60	|	✓
	61	|	|
	62	✓	✓
	63		
	64		
	65		
	66		
	67		
	68		
	69		
	70		
	71		
	72		
	73		
	74		
	75		
	76		
	77		
	78		
	79		
	80		
	81		
	82		
	83		
	84		
	85		
	86		
	87		
	88		
	89		
	90		
	91		
	92		
	93		
	94		
	95		
	96		
	97		
	98		
	99		
	100		

Claim Final	Claim Original	Date
	101	
	102	
	103	
	104	
	105	
	106	
	107	
	108	
	109	
	110	
	111	
	112	
	113	
	114	
	115	
	116	
	117	
	118	
	119	
	120	
	121	
	122	
	123	
	124	
	125	
	126	
	127	
	128	
	129	
	130	
	131	
	132	
	133	
	134	
	135	
	136	
	137	
	138	
	139	
	140	
	141	
	142	
	143	
	144	
	145	
	146	
	147	
	148	
	149	
	150	

U.S. Patent and Trademark Office

Part of Paper No. 02032004

Search Notes

Application No.	Applicant(s)	
10/311,814	SPINO ET AL.	
Examiner	**Art Unit**	
Raymond J. Henley III	1614	

SEARCHED

Class	Subclass	Date	Examiner
514	348	2/2/2004	RJH
↓	616	↓	↓
updated		9/2/04	TH
updated		3/22/05	A

INTERFERENCE SEARCHED

Class	Subclass	Date	Examiner

SEARCH NOTES (INCLUDING SEARCH STRATEGY)

	DATE	EXMR
STN Search: CAPLUS, USPATFULL, MEDLINE	2/2/2004	RJH
Palm Inventor Name Search: - Michael Spino - Antonio Piga	↓	↓
updated	9/2/04	TH
updated	3/22/05	A

IN THE UNITED STATES PATENT OFFICE

Application Serial No. 10/311,814

Our Ref.: PC-1834033
CUSTOMER NO. 23607

Ivr fee only

Applicant: Apotex Inc.

Agent: Neil H. Hughes, P.Eng.
c/o Ivor M. Hughes
Barrister & Solicitor
Patent & Trade Mark Agents
Suite 200
175 Commerce Valley Dr. W.
Thornhill, Ontario
Canada L3T 7P6

Title: A NEW USE FOR DEFERIPRONE

Inventors: Michael Spino and Antonio Piga

Examiner: Raymond J. Henley III

Group Art Unit: 1614 **Due Date: December 8, 2004**

RESPONSE TO OFFICIAL ACTION OF SEPTEMBER 8, 2004

December 6, 2004

VIA COURIER

U.S. Patent and Trademark Office
220 20th Street South
Customer Window, Mail Stop Amendment
Crystal Plaza Two, Lobby, Room 1B03
Arlington VA 22202

Dear Sir:

This submission is in response to the outstanding Official Action dated September 8, 2004 and due for response December 8, 2004. Should any fee be required for this submission or if there is any deficiency or surplusage of fees required please obtain any such fees or deficiency or credit the surplusage to Deposit Account 08-3255 and advise Applicants' Agent.

Please enter the following submissions:

1/28/2005 FPATTERS 00000001 083255 10311814
1 FC:1202 4150.00 DA

Adjustment date: 06/08/2005 SDIRETA1
01/28/2005 FPATTERS 00000001 083255 10311814
01 FC:1202 4150.00 CR

Ivor M. Hughes
Barrister & Solicitor
Patent & Trade Mark Agents
Canada, United States

Barristers & Solicitors
Ivor M. Hughes
Rick Tuzi
Patent Agents
Neil H. Hughes, P.Eng.
Marcelo K. Sarkis, P.Eng.
Wm. Kitt Sinden

Our Ref.: PT-1834033

December 19, 2002

COPY

VIA COURIER

The Commissioner of Patents
UNITED STATES PATENT OFFICE
2011 South Clark Place
Crystal Plaza 2, Room 1B03
Arlington, Virginia U.S.A. 22202

Dear Sir:

Re: National Phase Entry in the **United States**
based on International Application
Number PCT/CA01/00956 filed on June 28, 2001
of Apotex Inc.
for A NEW USE FOR DEFERIPONE
CUSTOMER NO. 23607
Due Date: December 30, 2002

Enclosed herewith please find the following documentation for filing with the Commissioner:

(a) Request Form PTO-1390 for National Entry into the United States of America;
(b) Informal combined Declaration for Patent Application and Power of Attorney document of Michael Spino and Antonio Piga;
(c) Copy of Published International Application Number WO02/02114 A1 published January 10, 2002, and International Search Report;
(d) Copy of Notification of Transmittal of the International Search Report;
(e) Copy of Notification of Transmittal of the International Preliminary Examination Report; and
(f) Preliminary Amendment attaching Exhibits A and B.

The Claims that stand in this U.S. National Phase Patent Application are **Claims 1, 2, 8 to 13, 18, 22 to 26, 30 to 33, 35, 37, 39, 41, 43, 45, 47, 49 and 51 to 62.**

175 Commerce Valley Dr. W., Suite 200, Thornhill, Ontario, Canada L3T 7P6 Phone: 905 771-6414 Fax: 905 771-6420
website: www.ivormhughes.com email: mail@ivormhughes.com

Also, enclosed along with this material please find a cheque in the amount of **$4,888.00 US dollars** made payable to **"The Commissioner of Patents"**. This sum includes $924.00 for 11 independent claims over and above the three allowed per application, $2,664.00 for 148 claims over and above the twenty claims allowed per application, $280.00 for multiple dependent claims fee, $890.00 for the International preliminary examination fee (37 CFR 1.482) not paid to USPTO but International Search Report prepared by the EPO or JPO, and $130.00 for furnishing the oath or declaration later than 30 months from the earliest claimed priority date (37 CFR 1.492(e)). If there is any surplus or deficiency, the Commissioner is authorized to credit the surplus or take the deficit from Applicant's Agent's Deposit Account No. 08-3255 and advise Applicants' Agent.

Also enclosed herewith is a stamped, self-addressed verification card which we request that you kindly acknowledge and return to this office at the earliest opportunity.

We thank the Commissioner for his cooperation in this regard and look forward to receiving filing data in this matter.

Respectfully submitted,

Neil H. Hughes, P.Eng.
Registration No. 33,636
Agent for Applicant

NHH:mse
Enclosures

We enclose a copy of our deposit account statement for January 2005, showing the transaction that occurred in error. If there are any questions please let me know.

Respectfully submitted,

Neil H. Hughes, P.Eng.
Agent for Applicant
Registration No. 33,636

NHH:md
Enclosures

cc: Raymond J. Henley III (via facsimile)

Ivor M. Hughes
Barrister & Solicitor
Patent & Trade Mark Agents
Canada, United States

Barristers & Solicitors
Ivor M. Hughes
Rick Tuzi
Mark Ng

Patent Agents
Neil H. Hughes, P.Eng.
Marcelo K. Sarkis, P.Eng.
Wm. Kitt Sinden

Our Ref.: PC-1834033

February 17, 2005

VIA FACSIMILE: 703-308-5077

Director of the United States Patent and Trademark Office
Attention: Deposit Accounts
One Crystal Park
2011 Crystal Drive, Suite 307
Arlington, Virginia, 22202

Dear Sir:

Re: Response to Examination Report
Application Serial No. 10/311,814 filed on April 4, 2003
of Michael Spino and Antonio Spiga
for A NEW USE FOR DEFERIPRONE
Group Art Unit: 1614
Examiner: Raymond J. Henley III
Deposit Account No. 08-3255
Customer No. 23607

On December 7, 2004, we filed a response to an Examination Report issued by Examiner Raymond J. Henley III. In that response, we requested that any additional fees be deducted from our deposit account, No. 08-3255. We have since been advised that the amount of $4,150.00 was deducted from our deposit account. We contacted the Examiner for this application, Raymond J. Henley III, and he does not know why this amount was removed. As such, our understanding of patent practice, along with that of the Examiner, is that this amount which was deducted from the deposit account was done so in error and that we require the full amount along with the $25.00 service charge be refunded. The necessary filing and claim fees of $4888.00 were properly paid when the application was filed as demonstrated by the attached cover letter which accompanied the original national phase entry application. The most recent amendment did not add any claims to the case and therefore was clearly an error on the part of the United States Patent Office.

175 Commerce Valley Dr. W., Suite 200, Thornhill, Ontario, Canada L3T 7P6 Phone: 905 771-6414 Fax: 905 771-6420
website: www.ivormhughes.com email: mail@ivormhughes.com

IN THE UNITED STATES PATENT OFFICE

CUSTOMER NO. 23607

Application Serial No. 10/311,814 Our Ref: PC-1834033

Filing Date: April 4, 2003

Applicant: Apotex inc.

Agent: Neil H. Hughes
Suite 200
175 Commerce Valley
Drive West
Thornhill, Ontario
L3T 7P6, Canada

Title: A NEW USE FOR DEFERIPRONE

Inventors: Michael Spino and Antonio Spiga

Examiner: Raymond J. Henry III

Group Art Unit: 1614

No. of Pages of Response including this sheet: 8

DELIVERED TO FACSIMILE NO. (703) 308-5077

Director of the United States Patent and Trademark Office
Attention: Deposit Accounts
One Crystal Park
2011 Crystal Drive, Suite 307
Arlington, Virginia, 22202

Dear Sir:

OFFICIAL COMMUNICATION

CERTIFICATION OF FACSIMILE TRANSMISSION

I hereby certify that this paper is being facsimile transmitted to the United States Patent Office Facsimile No. (703) 308-5077 on the date shown below, including:

1. Letter Dated February 17, 2005 with attachments

Signature: _____ Date: February 17, 2005

Neil H. Hughes
Registration No. 33,636
Agent for Applicant

United States Patent and Trademark Office

COPY

Return To: USPTO Home Page | Finance Online Shopping Page

Deposit Account Statement

Requested Statement Month:	January 2005
Deposit Account Number:	083255
Name:	IVOR M. HUGHES, BARRISTER & SOLICITOR
Attention:	ESTE HUGHES
Address:	175 COMMERCE VALLEY DR WEST
City:	THORNHILL
State:	
Zip:	L3T 7P6

DATE	SEQ	POSTING REF TXT	ATTORNEY DOCKET NBR	FEE CODE	AMT	BAL
01/28	1	10311814	PC-1834033	1202	$4,150.00	$924.09
01/31	77	SERVICE CHARGE		9202	$25.00	$899.09

START BALANCE	SUM OF CHARGES	SUM OF REPLENISH	END BALANCE
$5,074.09	$4,175.00	$.00	$899.09

Need Help? | Return to USPTO Home Page | Return to Finance Online Shopping

U.S. APPLICATION NO. (If known, see 37 CFR 1.5)	INTERNATIONAL APPLICATION NO. PCT/CA01/00956	ATTORNEY'S DOCKET NUMBER PC-1834000

21. ☒ The following fees are submitted:	CALCULATIONS PTO USE ONLY	
BASIC NATIONAL FEE (37 CFR 1.492 (a) (1) - (5)):		
Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO and International Search Report not prepared by the EPO or JPO $1040.00		
International preliminary examination fee (37 CFR 1.482) not paid to USPTO but International Search Report prepared by the EPO or JPO $890.00		
International preliminary examination fee (37 CFR 1.482) not paid to USPTO but international search fee (37 CFR 1.445(a)(2)) paid to USPTO $740.00		
International preliminary examination fee (37 CFR 1.482) paid to USPTO but all claims did not satisfy provisions of PCT Article 33(1)-(4) $710.00		
International preliminary examination fee (37 CFR 1.482) paid to USPTO and all claims satisfied provisions of PCT Article 33(1)-(4) $100.00		
ENTER APPROPRIATE BASIC FEE AMOUNT =	$ 840.00	
Surcharge of $130.00 for furnishing the oath or declaration later than 30 months from the earliest claimed priority date (37 CFR 1.492(e)).	$ 130.00	

CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE	$	
Total claims	168 - 20 =	148	x $18.00	$ 2,664.00	
Independent claims	14 - 3 =	11	x $84.00	$ 924.00	
MULTIPLE DEPENDENT CLAIM(S) (if applicable)			+ $280.00	$ 280.00	
TOTAL OF ABOVE CALCULATIONS =				$ 4,888.00	
☐ Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 1/2.			+	$	
SUBTOTAL =				$ 4,888.00	
Processing fee of $130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(f)).				$ ---	
TOTAL NATIONAL FEE =				$ 4,888.00	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). $40.00 per property +				$ ---	
TOTAL FEES ENCLOSED =				$ 4,888.00	
				Amount to be refunded:	$
				charged:	$

a. ☒ A check in the amount of $ 4,888.00 USD to cover the above fees is enclosed.

b. ☐ Please charge my Deposit Account No. _____ in the amount of $ _____ to cover the above fees. A duplicate copy of this sheet is enclosed.

c. ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 08-3255 . A duplicate copy of this sheet is enclosed.

d. ☐ Fees are to be charged to a credit card. **WARNING:** Information on this form may become public. **Credit card information should not be included on this form.** Provide credit card information and authorization on PTO-2038.

NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137 (a) or (b)) must be filed and granted to restore the application to pending status.

SEND ALL CORRESPONDENCE TO:

SIGNATURE

Neil H. Hughes, P.Eng.
NAME

33,636
REGISTRATION NUMBER

FORM PTO-1390 (REV. 11-2002) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371

ATTORNEY'S DOCKET NUMBER: PC-1834033

U.S. APPLICATION NO. (If known, see 37 CFR 1.5):

INTERNATIONAL APPLICATION NO.	INTERNATIONAL FILING DATE	PRIORITY DATE CLAIMED
PCT/CA01/00956	28 June 2001 (28.06.01)	30 June 2000 (30.06.00)

TITLE OF INVENTION: A NEW USE FOR DEFERIPRONE

APPLICANT(S) FOR DO/EO/US: MICHAEL SPINO and ANTONIO PIGA

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. [X] This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.
2. [ ] This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 U.S.C. 371.
3. [X] This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.
4. [ ] The US has been elected (Article 31).
5. [X] A copy of the International Application as filed (35 U.S.C. 371(c)(2))
   a. [X] is attached hereto (required only if not communicated by the International Bureau).
   b. [ ] has been communicated by the International Bureau.
   c. [ ] is not required, as the application was filed in the United States Receiving Office (RO/US).
6. [ ] An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).
   a. [ ] is attached hereto.
   b. [ ] has been previously submitted under 35 U.S.C. 154(d)(4).
7. [X] Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))
   a. [X] are attached hereto (required only if not communicated by the International Bureau).
   b. [ ] have been communicated by the International Bureau.
   c. [ ] have not been made; however, the time limit for making such amendments has NOT expired.
   d. [ ] have not been made and will not be made.
8. [ ] An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371 (c)(3)).
9. [X] An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)). (Informal)
10. [ ] An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).

Items 11 to 20 below concern document(s) or information included:

11. [ ] An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
12. [ ] An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
13. [X] A preliminary amendment.
14. [ ] An Application Data Sheet under 37 CFR 1.76.
15. [ ] A substitute specification.
16. [ ] A power of attorney and/or change of address letter.
17. [ ] A computer-readable form of the sequence listing in accordance with PCT Rule 13*ter*.2 and 37 CFR 1.821 - 1.825.
18. [ ] A second copy of the published international application under 35 U.S.C. 154(d)(4).
19. [ ] A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).
20. [X] Other items or information: Acknowledgement Receipt Card

page 1 of 2

PATENT APPLICATION SERIAL NO. _____

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE
FEE RECORD SHEET

06/08/2005 SDIRETA1 00000003 10311814

01 FC:1203 280.00 DP
02 FC:1202 2178.00 DP

12/27/2002 MKAYPAGH 00000089 10311814

01 FC:1613 390.00 DP
02 FC:1617 130.00 DP
~~03 FC:1615~~ ~~2664.00 DP~~
04 FC:1614 924.00 DP
~~05 FC:1616~~ ~~280.00 DP~~

Adjustment date: 01/31/2003 GFREY1
12/27/2002 MKAYPAGH 00000089 10311814
03 FC:1615 -2664.00 DP
05 FC:1616 -280.00 DP

01/31/2003 GFREY1 00000010 10311814
~~01 FC:1806~~ ~~2458.00 DP~~
01/31/2003 GFREY1 00000011 10311814
~~01 FC:1205~~ ~~486.00 DP~~

Adjustment date: 02/07/2003 GFREY1
01/31/2003 GFREY1 00000011 10311814
~~01 FC:1206~~ ~~486.00 DP~~

Adjustment date: 02/07/2003 GFREY1
01/31/2003 GFREY1 00000010 10311814
~~01 FC:1205~~ ~~2458.00 DP~~

02/07/2003 GFREY1 00000003 10311814
01 FC:1615 486.00 DP

Repln. Ref: 02/07/2003 GFREY1 0014561300
DA#:083255 Name/Number:10311814
FC: 9204 $2458.00 CR

PTO-1556
(5/87)

*U.S. Government Printing Office: 2002 — 489-267/59033

IN THE UNITED STATES PATENT OFFICE

Patent Application Serial No.: [redacted]

Our Ref: PC-1834033
CUSTOMER NO. 23607

Applicants: Apotex Inc.

Agent: Neil H. Hughes, P. Eng.
c/o Ivor M. Hughes
Barrister & Solicitor
Patent & Trade Mark Agents
Suite 200,
175 Commerce Valley Dr. W.
Thornhill, Ontario.
L3T 7P6, CANADA

[redacted]

RECEIVED
CENTRAL FAX CENTER
SEP 2 9 2005

IN THE UNITED STATES PATENT OFFICE

Application Serial No. 10/311,814

Our Ref.: PC-1834033
CUSTOMER NO. 23607

Applicant: Apotex Inc.

Agent: Neil H. Hughes, P.Eng.
c/o Ivor M. Hughes
Barrister & Solicitor
Patent & Trade Mark Agents
Suite 200
175 Commerce Valley Dr. W.
Thornhill, Ontario
Canada L3T 7P6

Title: A NEW USE FOR DEFERIPRONE

Inventors: Michael Spino and Antonio Piga

Examiner: Raymond J. Henley III

Group Art Unit: 1614 **Due Date: September 29, 2005**

RESPONSE TO OFFICIAL ACTION OF MARCH 29, 2005

September 29, 2005

VIA FACSIMILE (571-273-8300)

United States Patent and Trademark Office
Customer Service Window, Mail Stop Amendment
Randolph Building
401 Dulany Street
Arlington VA 22314

Dear Sir:

This submission is in response to the outstanding Official Action dated March 29, 2005 due for response by June 29, 2005. Applicant encloses a Request for a three month extension of time for a large entity and Applicant authorizes the Commissioner to access Applicant's Agent's Deposit Account No. 08-3255 in the amount of **$1,020.00 U.S** in payment of the three-month extension of time fee making the response due **September 29, 2005.** Should any additional fee be required for this submission or if there is any deficiency or surplusage of fees required please obtain any such fees or deficiency or credit the surplusage to Deposit Account 08-3255 and advise Applicants' Agent.

IN THE CLAIMS

The claims are amended for the purpose of expediting the prosecution of this case. No admission is made that the Examiner's allegations are correct and Applicant reserves its right to reintroduce any claims amended herein in a continuation, divisional or C.I.P. application.

Please amend the claims as follows:

1. (currently amended) A method of treating iron induced cardiac disease in a transfusion dependent patient experiencing an iron overload condition of the heart, said method comprising administering to the patient a therapeutically effective amount of deferiprone or a physiologically acceptable salt thereof sufficient to stabilize/reduce/iron accumulation in the heart resulting from being transfusion dependent. ~~and preventing further iron accumulation in the heart normally associated with iron induced cardiac disease.~~

2. (currently amended) A method of ~~preventing iron induced cardiac disease in~~ treating iron loading in the heart of a transfusion dependent patient experiencing an iron overload condition of the heart, said method comprising administering to the transfusion dependent patient a therapeutically effective amount of deferiprone or a physiologically acceptable salt thereof sufficient to treat ~~prevent~~ further iron accumulation in the heart normally associated with iron induced cardiac disease.

3-7 (cancelled)

8. (cancelled)

9. (cancelled)

10. (cancelled)

11. (currently amended) A method of treating iron loading in the heart of a ~~preventing iron induced heart disease in~~ transfusion dependent patients risking iron overload of the heart, comprising the administration of a therapeutically effective amount of deferiprone or a physiologically acceptable salt thereof to the patient. ~~sufficient to prevent iron induced cardiac disease.~~

12. (previously amended) A method of stabilizing iron induced heart disease in transfusion dependent patients having iron overload, comprising the administration of a therapeutically effective amount of

deferiprone or a physiologically acceptable salt thereof sufficient to treat iron burden in the heart normally associated with iron induced cardiac disease.

13. (previously amended) A method of reducing the iron burden in the heart associated with iron induced heart disease in transfusion dependent patients having iron overload, comprising the administration of a therapeutically effective amount of deferiprone or a physiologically acceptable salt thereof sufficient to reduce the iron burden of the heart normally associated with iron induced cardiac disease.

14-17 (cancelled)

18. (cancelled)

19-21 (cancelled)

22. (currently amended) A method of treating iron induced heart disease in a transfusion dependent patient having an iron overload condition of the heart comprising administering to the patient a therapeutically effective amount of deferiprone, or a physiologically acceptable salt thereof in order to reduce the iron stores in the heart in preference to general iron stores ~~less critical organs/tissue~~ in the body~~.~~, such as found in the liver.

23. (currently amended) A method of ~~preventing iron induced heart disease in~~ treating iron loading in the heart of a transfusion dependent patients having an iron overload condition of the heart comprising administering to the patient a therapeutically effective amount of deferiprone or a physiologically acceptable salt thereof to chelate the iron stores in the heart in preference to ~~the iron stores in~~ general iron stores ~~less critical organs/tissue~~ in the body~~.~~, such as found in the liver.

24. (currently amended) A method of ~~reversing iron induced heart disease in~~ treating iron loading in the heart of a transfusion dependent patients having an iron overload condition of the heart comprising administering to the patient a therapeutically effective amount of deferiprone or a physiologically acceptable salt thereof to reduce the iron stores in the heart in preference to ~~the iron stores in~~ general iron stores ~~less critical~~ organs/tissue in the body~~.~~, such as found in the liver.

25. (currently amended) A method of treatment~~, prevention, or reversal~~ of iron induced heart disease in a transfusion dependent patient having an iron overload condition of the heart comprising

administering to the patient a therapeutically effective amount of deferiprone or a physiologically acceptable salt thereof for the direct reduction/removal of intracellular iron stores in the heart.

26. (currently amended) A method to ~~prevent/treat/reverse~~ the occurrence of iron-induced cardiac disease in a transfusion dependent patients with an iron overload condition, comprising administering to said patient a therapeutically effective amount of deferiprone or a physiologically acceptable salt thereof, wherein deferiprone's efficacy is cardio preferential when compared with its ability to lower total iron stores in the body.

27-29 (cancelled)

30. (currently amended) The method of claims 1, 2, 11, 12, 13, 22, 23, 24, 25 or 26 wherein deferiprone or a physiologically acceptable salt thereof is administered orally for treating ~~preventing~~ the risk of iron induced heart disease in patients having iron overload.

31. (previously amended) The method of claims 1, 2, 11, 12, 13, 22, 23, 24, 25 or 26 wherein deferiprone or a physiologically acceptable salt thereof is administered orally for stabilizing the risk of iron induced heart disease in patients having iron overload.

32. (previously amended) The method of claims 1, 2, 11, 12, 13, 22, 23, 24, 25 or 26 wherein deferiprone or a physiologically acceptable salt thereof is administered orally for reducing the risk of iron induced heart disease in patients having iron overload.

33. (previously amended) The method of claims 1, 2, 11, 12, 13, 22, 23, 24, 25 or 26 wherein deferiprone or a physiologically acceptable salt thereof is present in an oral dosage form with other excipients.

34. (cancelled)

35. (currently amended) The method of claims 1, 2, 11, 12, 13, 22, 23, 24, 25 or 26 wherein the administration frequency to the patient of an amount of deferiprone or a physiologically acceptable salt thereof is daily ~~and substantially~~ in the range of up to 150mg per kilogram of body weight.

36. (cancelled)

37. (currently amended) The method of claims 1, 2, 11, 12, 13, 22, 23, 24, 25 or 26 wherein the administration frequency to the patient of a dosage amount of deferiprone or a physiologically acceptable salt thereof is daily ~~and substantially~~ in the range of up to 125 mg per kilogram of body weight.

38. (cancelled)

39. (currently amended) The method of claims 1, 2, 11, 12, 13, 22, 23, 24, 25 or 26 wherein the administration frequency to the patient of a dosage amount of deferiprone or a physiologically acceptable salt thereof is daily ~~and substantially~~ in the range of 25mg to 75mg per kilogram of body weight.

40. (cancelled)

41. (previously amended) The method of claims 1, 2, 11, 12, 13, 22, 23, 24, 25 or 26 wherein deferiprone is administered in a manner selected from the group of intravenously, transdermally, rectally, orally, bucally, or aurally.

42. (cancelled)

43. (previously amended) The method of claims 1, 2, 11, 12, 13, 22, 23, 24, 25 or 26 wherein deferiprone is administered orally.

44. (cancelled)

45. (previously amended) The method of claims 1, 2, 11, 12, 13, 22, 23, 24, 25 or 26 wherein deferiprone or a physiologically acceptable salt thereof is in a sustained release formulation.

46. (cancelled)

47. (previously amended) The method of claims 1, 2, 11, 12, 13, 22, 23, 24, 25 or 26 wherein deferiprone has a cardio preferred/selective function when compared to desferrioxamine or other alternative chelating agents utilized in patients suffering iron overload.

48. (cancelled)

49. (previously amended) The method of claims 1, 2, 11, 12, 13, 22, 23, 24, 25 or 26 wherein desferrioxamine is administered in addition to deferiprone.

50. (cancelled)

51. (cancelled)

52. (cancelled)

53. (cancelled)

54. (cancelled)

55. (cancelled)

56. (cancelled)

57. (cancelled)

58. (cancelled)

59. (cancelled)

60. (cancelled)

61. (cancelled)

62. (cancelled)

REMARKS

The Examiner is thanked for the time spent during the telephone interview with Applicant's agent, Neil H. Hughes, in discussing the status of this application and for his suggestions and co-operation with respect to providing the IDS documents on a CD.

The Examiner has stated in his action of March 29, 2005 that claims 12 and 13 are in condition for allowance. The Examiner is thanked for this information.

It is also noticed the Information Disclosure filed December 8, 2004 has been received and entered into the application file.

Examiner has objected to Claim 1 as it contains a grammatical error with regard to "reduce/iron". Claim 1 has been amended to comply with the Examiner's suggestion.

Claims 1, 2, 11, 22-26, 30-33, 35, 37, 39, 41, 43, 45, 47 and 49 now stand rejected under 35 U.S.C. 112, first paragraph, because the specification allegedly does not reasonably provide enablement for the prevention or reversal of such disease. The claims therefore have been amended to overcome the Examiner's objections and withdrawal of said rejection is respectfully requested. Applicant has determined that most assuredly the specification supports treatment of iron induced cardiac disease if not prevention/reversal although no admission is made that these terms are not supported. Black's Law Dictionary, copy attached of page 1502, defines treatment as follows:

> "A broad term covering all steps taken to effect a cure of an injury or disease; including examination and diagnosis as well as application of remedies."

It is submitted therefore that the amendments made to the claims are proper and set out the true intention of the specification namely the treatment of accumulation of iron in the heart of a transfusion dependent patient, consistent with the definitions provided in the claim set as amended.

It is well understood in the art that patients suffering from thalassemia in order to survive must continually undergo blood transfusions. These regular blood transfusions cause an increase in overall body iron load in transfusion dependent patients, including iron loading of the heart.

For a transfusion dependent patient the additional iron load resulting from blood transfusions must be chelated to prevent accumulation in the heart cells. The preferential chelation of iron in heart cells by deferiprone as opposed to general loading of iron in the body, as reflected by the liver which is the

major organ for storing excess iron, has been shown more recently in Anderson et al. (2002) which is enclosed herewith for the Examiner's convenience. Clearly deferiprone has been shown more effective then desferrioxamine by this leading article. The article was published after the priority date of the present application (included herewith in a Supplementary IDS): **Anderson, L.J. et al., "Comparison of effects of oral deferiprone and subcutaneous desferrioxamine on myocardial iron concentrations and ventricular function in beta-thalassemia", The Lancet, Vol. 360, August 17, 2002, pp. 516-520**.

It is stated therein: at page 519, second column, centre of page:

> "...Thus, direct myocardial iron measurements are essential. Our results indicate significantly lower myocardial iron content and a lower proportion of patients with excess myocardial iron in the deferiprone group than in the desferrioxamine controls, combined with better left-ventricular ejection fractions. These findings suggest a cardioprotective effect of deferiprone, arising despite the higher liver iron contents in the deferiprone group. These results show that deferiprone is an effective chelator for myocardial iron, and emphasises the importance of the variation between organs in iron concentrations and most notably the poor correlation between liver and myocardial iron.[9,27]..."

It is also stated at page 516, first column, last paragraph:

> "Conventional chelation treatment with subcutaneous desferrioxamine does not prevent excess cardiac iron deposition in two-thirds of patients with thalassaemia major, placing them at risk of heart failure and its complications. Oral deferiprone is more effective than desferrioxamine in removal of myocardial iron."

Clearly the teachings of Anderson above-mentioned support the position that deferiprone is able to reverse heart disease. Please refer to Figure 2 and the related description. However Applicant has carefully amended the claim set to eliminate use of the terms prevention or reversal in order to move the case forward and for no other purpose. Applicant has therefore used "treatment" in place thereof, as found in the attached definition. With respect to the Examiner's comments at the bottom of page 5 to the top of page 6, Anderson clearly supports Applicant's position that "reversal" is possible (see Figure 2) contrary to the Examiner's assertions. Applicant also wishes to point out to the Examiner that deferiprone and desferrioxamine are not related drugs. Their chemical structures, physical properties and mode of action are different. But they both chelate iron. However, where and how they accomplish this task is completely different for both drugs. It is the mode of action of deferiprone which sets it apart in relation to heart disease when compared to desferrioxamine.

The Examiner is directed to the critical difference in the mode of action between deferiprone and desferrioxamine as specified in Anderson. Indeed, deferiprone is a much smaller molecule which can enter heart cells and remove iron therefrom, something that cannot be readily accomplished by desferrioxamine because it is, a much larger molecule. Again Figure 2 of Anderson on page 518, clearly illustrates removal of iron and normalization/improvement of heart function in two patients on deferiprone. Desferrioxamine may, when given as an intravenous treatment, 24 hr/day in high doses, reverse heart disease in some patients which clearly is not practical, but the condition typically returns when the patient is placed back on standard subcutaneous therapy, 8-12 hr/day. Even in this case, the iron removal from the heart is secondary to total body iron reduction, not a preferential cardioprotective effect. Patients with continuous IV therapy of desferrioxamine are also exposed to a whole new set of risks, such as life-threatening infection from the "portacath" used to infuse the drug.

Applicant has discovered that deferiprone acts preferentially in removing iron from heart cells. This preference of deferiprone to heart cells results in "treatment" of iron induced heart disease by using deferiprone as an iron chelator in preference to desferrioxamine.

Referring to the Examiner's statements on at page 5 of the Office action:

> *"Because such data is lacking in the present specification, and the Examiner cannot locate data showing such prevention or reversal, it is the Examiner's position that the artisan would not be enabled to practice the present invention in a manner commensurate in scope with the claims, which include both the prevention and reversal of iron-induced cardiac disease."*

It is submitted that the teachings of Applicant's specification, Liu, and Anderson support the claim set as amended herewith as well as the prior claim set. It is the prevention of iron accumulation that would otherwise lead to heart failure and the reduction in iron accumulation and loading of the heart in a transfusion dependent patient that is a focus of Applicant's invention which results in the prevention of heart disease or the reversal of heart disease. This in fact may be a result of "treating" the patient according to the methods of the amended claims. The term "treatment" is presumed to follow the definition found in "Blacks Law Dictionary" enclosed herewith.

Applicant also provides herewith the following documents for the Examiner's information in the supplementary IDS.

1. Butler, Craig, New York Academy of Sciences Symposium, The Eighth Cooley's Anemia Symposium was a valuable resource for medical professionals and patients: May 17, 2005.

2. U.S. Newswire, Cooley's Anemia Foundation Presents Symposium on Iron Overload and Cardiac Disease: New Interventions, December 10, 2004

With reference 1 the following comments are found from Dr. Caterina Borgna-Pignatti:

> *In a speech entitled "Survival and Complications in Thalassemia," Caterina Borgna-Pignatti, MD from the University of Ferrara in Italy, discussed a study involving more than 500 patients from 7 centers in Italy who were treated with deferiprone (L1) or deferoxamine (Desferal) during the past 9 years and who were monitored for heart disease and mortality. In this retrospective study, when the patients who used deferiprone were compared to those who used only deferoxamine, it was found that heart disease and death were significantly more frequent in those who had not received deferiprone. This was true even though the deferiprone-treated group was more heavily iron loaded prior to starting the drug. The majority of the deaths on the deferoxamine-treated group were cardiac related.*

With reference 2 the following further comments were made:

i) Dr. John Wood

> *Dr. John Wood, cardiologist at Children's Hospital of Los Angeles (CHLA), discussed recent advances in MRI that have led to the development of a cardiac MRI method employing the T2 technique that enables one to assess iron-loading in the heart. He noted that using this methodology, CHLA and several other centers around the world have found that there is a lack of correlation between liver iron and heart iron concentrations, limiting the usefulness of liver iron concentrations as the sole predictor of heart disease. Most importantly, he stated that in the US it is fairly common for patients with "acceptable" levels of iron in the liver to have increased concentrations of iron in the heart.*

ii) Dr. Dudley Pennell

> *Dr. Dudley Pennell, professor of cardiology, Royal Brompton Hospital, London, reported on the results generated from the use of cardiac MRI T2 technique in thalassemia patients. By applying this sensitive and reproducible technique, a team of cardiologists and thalassemia experts reviewed the cardiac MRI T2 results of patients treated long-term with deferiprone and found that most of them had normal levels of iron in the heart, compared to a matched group of patients who had remained on desferrioxamine, most of whom had high levels of iron in the heart.*

Applicant believes that the Examiner's requirement for supporting clinical data has been fulfilled by the submission of the above-mentioned post priority filing date papers and the comments of Doctors Anderson, Wood, Pennell and Borgna-Pignatti contained therein.

In light of the above, Applicant respectfully requests favourable consideration by the Examiner of the amended claim set provided herewith.

The Examiner also indicated that claims 1and 2 though not directed to the prevention or reversal of iron-induced cardiac disease include the statement "further iron accumulation in the heart" is prevented. Applicant submits that the specification and the teachings of Liu, Anderson and Pennell fully supports that such accumulation could actually be prevented. Applicant's amendments and arguments provided above, set out a proper response to this rejection, and withdrawal of the Examiner's rejection is respectfully requested.

Applicant respectfully has provided suitable proof to address the Examiner's allegations under 35 U.S.C. 112, first paragraph that there is no enablement for prevention or reversal of an iron induced cardiac disease. However, it is noted that the Examiner has under the same portion of the statute agreed that treating, stabilizing and reducing/stabilizing the risk of iron induced cardiac disease is in fact enabled in the disclosure.

However, since transfusion dependent patients are transfused on a regular basis, namely about once every 2 to 3 weeks, iron loading of the body and the heart is a continuing reality. The transfusions must be continued in order for the patient to have a sufficient level of hemoglobin to survive. But clearly Applicant's discovery has in fact resulted in a new regimen being utilized by cardiac practitioners, which was not the case prior to this discovery. There is no cure of the dependency of these patients on transfusions, unless a very risky bone marrow transplant takes place. But Applicant has discovered and disclosed that the use of deferiprone as an iron chelator will achieve significant results and in fact as per the disclosure and Anderson and specifically Figure 2 is capable of reversing the amount of iron accumulated in the heart.

The Examiner on page 4 of his action mistakenly quotes sections from Applicant's prior statements in the present application relating to desferrioxamine and not to deferiprone. It is the long felt need established by the use of desferrioxamine that has been addressed by the use of deferiprone as set out in the amended claim set. No conclusions by the Examiner therefore can be reached with respect to deferiprone by any statements made in relation to desferrioxamine since the two compositions are not comparable with respect to iron chelation abilities for the heart. The Examiner has also quoted at the

bottom of page 4 of his action with respect to iron induced cardiac disease occurring in patients who are compliant with desferrioxamine. That is because desferrioxamine in fact has little cardiac preferential action unlike deferiprone. Therefore the Examiner is attempting to misapply this statement to reach a general conclusion with respect to his doubt with respect to the efficacy of deferiprone. The present disclosure provides information to one skilled in the art where they would be motivated to achieve success in carrying out Applicant's methods in using deferiprone for affecting iron loading of the heart.

The unique cardioprotective effect of deferiprone most likely is effected by a combination of mechanisms. One is the intracellular removal of iron, bound to deferiprone, which in its absence remains within the cell. This is possible because of the ease of intracellular penetration of deferiprone and its ability to transport iron out of the cell. Another mechanism is that the iron that remains within the cell is bound by deferiprone and is prevented from generating free-radical induced damage to the myocyte. The work of Hasinoff's group is revealing in this regard. Hasinoff, after studying the effect of deferiprone in neonatal rat cardiomyocytes, states.

"Together these results suggest that deferiprone may protect against doxorubicin-induced damage to myocytes by displacing iron bound to doxorubicin, or chelating free or loosely bound iron, thus preventing site-specific iron-based oxygen radical damage." (Barnabee et al. Free Radical Biology & Medicine, Vol. 33, No. 2, pp. 266–275, 2002).

Notably, this is not just a function of any iron chelator, not even any chelator which can enter the cell, as revealed by Hasinoff in a related study, this time using ICL670. Here Hasinoff stated, "ICL670A, in contrast, depending upon the concentration, synergistically increased or did not affect the cytotoxicity of doxorubicin. This occurred in spite of the fact that ICL670A quickly and efficiently removed iron(III) from its complex with doxorubicin, and rapidly entered myocytes and displaced iron from a fluorescence-quenched trapped intracellular iron-calcein complex." (Hasinoff et al. Free Radical Biology & Medicine, Vol. 35, No. 11, pp. 1469–1479, 2003).

To clarify Applicant's meaning with respect to the term "prevention" it is intended that the iron loading on the heart of a transfusion dependent patient would ultimately affect the function of the heart to a level beyond that which is normal. It is submitted that the use of deferiprone will prevent abnormal functioning of the heart because of the removal of the iron stores therein. One recent article refers to the cleansing of a heart to a normal level to the point where almost no iron accumulation is present. Should the Examiner require further submissions in this regard this will be provided.

Applicant therefore takes exception to the Examiner's comments for the above-mentioned reasons and asks for full reconsideration. Just because the therapy with desferrioxamine failed in relation to its cardioprotective value does not mean the same is the case with deferiprone, as the Examiner had incorrectly stated at the bottom of page 5 and continuing on to the top of page 6 of his action. The whole point of Applicant's discovery and hence its invention reflects the long felt need and the failure of desferrioxamine to be cardio effective in many patients.

Clearly the present disclosure provides one skilled in the art the ability to practice the inventions set out in the claim set without the need for undue experimentation as alleged by the Examiner. The disclosure sets out in clear, precise and exact terms what one skilled in the art must do in order to carry out the regimen of applying the methods taught therein. If one skilled in the art will carry out that regimen the success reported will also be achieved. This has been reflected in the post priority filing date documents following the present application in the peer reviewed literature.

Claims 22-24, 30-33, 35, 37, 39, 41, 43, 45, 47 and 49 now stand rejected under 35 U.S.C. 112, second paragraph, as being allegedly indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Examiner states that the phrase "less critical" in the expression "less critical organs/tissue in the body" (claims 22-24) and "substantially" in the expression "substantially in the range of ..." (claims 35, 37 and 39) are relative terms which render the claims indefinite. Applicant has therefore amended claims 22-24 by deleting the expression "less critical" organs and replaced it with "general iron stores in the body, such as found in the liver". The term "substantially" has also been removed from the amended claims. The amendment therefore overcomes the Examiner's rejection, and full reconsideration is respectfully requested.

Applicant submits that claims 30-33 as amended identifies the treatment, stabilization and reduction of the risk of heart disease in patients having iron overload. In light of the arguments and amendments presented with this response, Applicant submits that the Examiner's concerns are overcome and full reconsideration is requested.

In view of the above submissions, Applicant respectfully submits that this application is now in condition for allowance and the same is solicited at the Examiner's earliest convenience.

If the Examiner has any questions, he is requested to contact Neil H. Hughes at (905) 771-6414.

Respectfully submitted,

Neil H. Hughes, P.Eng.
Registration No. 33,636
Agent for the Applicant

NHH/lvp
Encls. IDS

RECEIVED
CENTRAL FAX CENTER
SEP 2 9 2005

PTO/SB/22 (12-04)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARMENT OF COMMERCE

PETITION FOR EXTENSION OF TIME UNDER 37 CFR 1.136(a) FY 2005 *(Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).)*	Docket Number (Optional) PC-1834033
Application Number 10/311,814	Filed April 4, 2003
For A NEW USE FOR DEFERIPRONE	
Art Unit 1614	Examiner Raymond J. Henley III

This is a request under the provisions of 37 CFR 1.136(a) to extend the period for filing a reply in the above identified application.

The requested extension and fee are as follows (check time period desired and enter the appropriate fee below):

		Fee	Small Entity Fee	
☐	One month (37 CFR 1.17(a)(1))	$120	$60	$
☐	Two months (37 CFR 1.17(a)(2))	$450	$225	$
☒	Three months (37 CFR 1.17(a)(3))	$1020	$510	$ 1020.00
☐	Four months (37 CFR 1.17(a)(4))	$1590	$795	$
☐	Five months (37 CFR 1.17(a)(5))	$2160	$1080	$

☐ Applicant claims small entity status. See 37 CFR 1.27.

☐ A check in the amount of the fee is enclosed.

☐ Payment by credit card. Form PTO-2038 is attached.

☐ The Director has already been authorized to charge fees in this application to a Deposit Account.

☒ The Director is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number 08-3255. I have enclosed a duplicate copy of this sheet.

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

I am the

☐ applicant/inventor.

☐ assignee of record of the entire interest. See 37 CFR 3.71.
Statement under 37 CFR 3.73(b) is enclosed (Form PTO/SB/96).

☒ attorney or agent of record. Registration Number 33,636

☐ attorney or agent under 37 CFR 1.34.
Registration number if acting under 37 CFR 1.34 _____

Signature — Date: Sept 27/05

Neil H. Hughes — Typed or printed name

905-771-6414 — Telephone Number

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.

☒ Total of 1 forms are submitted.

This collection of information is required by 37 CFR 1.136(a). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 6 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

RECEIVED
CENTRAL FAX CENTER

SEP 2 9 2005

IN THE UNITEDSTATES PATENT OFFICE

Patent Application Serial No.: 10/311,814

Our Ref: PC-1834033
CUSTOMER NO. 23607

Applicants: Apotex Inc.

Agent: Neil H. Hughes, P. Eng.
c/o Ivor M. Hughes
Barrister & Solicitor
Patent & Trade Mark Agents
Suite 200,
175 Commerce Valley Dr. W.
Thornhill, Ontario.
L3T 7P6, CANADA

Title: A NEW USE FOR DEFERIPRONE

Inventors: Michael Spino and Antonio Piga

Examiner: Raymond J. Henley III

Group Art Unit: 1614

Due Date: September 29, 2005

No. of Pages including this sheet: 19 (PART 1)

DELIVERED TO FACSIMILE NO. (571-273-8300)

September 29, 2005

RECEIVED
OIPE/IAP

SEP 3 0 2005

Commissioner of Patents
Customer Service Window, Mail Stop Amendment
Randolph Building
401 Dulany Street
Arlington, VA 22314

Dear Mr. Henley:

CERTIFICATION OF FACSIMILE TRANSMISSION

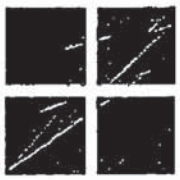
I hereby certify that this paper:
1) Letter to US Patent Office filing Response to Office Action & IDS dated September 29, 2005
2) Transmittal Form
3) Response to Official Action dated March 29, 2005
4) Request for Extension of Time (in duplicate)

is being facsimile transmitted to the United States Patent Office Facsimile No. (571) 273-8300 on the date shown below.

NEIL H. HUGHES
Agent for Applicant

Signature: _____ Date: September 29, 2005

RECEIVED
CENTRAL FAX CENTER
SEP 2 9 2005



Ivor M. Hughes
Barrister & Solicitor
Patent & Trade Mark Agents
Canada, United States

Barristers & Solicitors
Ivor M. Hughes
Rick Tuzi

Patent Agents
Neil H. Hughes, P.Eng.
Marcelo K. Sarkis, P.Eng.
Wm. Kitt Sinden
Samuel T. Tekie, P.Eng.

Our Ref.: PC-1834033

September 29, 2005

VIA FACSIMILE (571-273-8300)

United States Patent and Trademark Office
Customer Service Window, Mail Stop Amendment
Randolph Building
401 Dulany Street
Arlington VA 22314

Dear Sir:

Re: United States Patent Application No. 10/311,814
of Michael Spino and Antonio Spiga
for A NEW USE FOR DEFERIPRONE
Due Date: September 29, 2005

Please find enclosed herewith the following:

1. Transmittal Form;
2. Petition for Extension of Time Under 37 CFR 1.136(a);
2. Response to Examination Report dated March 29, 2005; and
3. Information Disclosure Statement with authorization to access deposit account No. 08-3255 for $180.00 US

If there should occur an overpayment of fees in respect of this submission, the Commissioner is authorized to access Deposit Account Number 08-3255 to make the appropriate adjustments and advise Applicant's agent.

Also enclosed herewith is a stamped, self-addressed verification card which we request that you kindly acknowledge and return to this office at the earliest opportunity.

We thank the Commissioner for his cooperation in this regard.

Respectfully submitted,

Neil H. Hughes, P.Eng.
Registration No. 33,636
Agent for Applicant

NHH:lvp
Encls.

175 Commerce Valley Dr. W., Suite 200, Thornhill, Ontario, Canada L3T 7P6 Phone: 905 771-6414 Fax: 905 771-6420
website: www.ivormhughes.com email: mail@ivormhughes.com

RECEIVED
CENTRAL FAX CENTER
SEP 2 9 2005

PTO/SB/21 (09-04)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission: 54

Application Number	10/311,814
Filing Date	April 4, 2003
First Named Inventor	Michael Spino
Art Unit	1614
Examiner Name	Raymond J. Henley III
Attorney Docket Number	PC-1834033

ENCLOSURES *(Check all that apply)*

- ☐ Fee Transmittal Form
  - ☐ Fee Attached
- ☑ Amendment/Reply
  - ☐ After Final
  - ☐ Affidavits/declaration(s)
- ☑ Extension of Time Request
- ☐ Express Abandonment Request
- ☑ Information Disclosure Statement
- ☐ Certified Copy of Priority Document(s)
- ☐ Reply to Missing Parts/ Incomplete Application
  - ☐ Reply to Missing Parts under 37 CFR 1.52 or 1.53
- ☐ Drawing(s)
- ☐ Licensing-related Papers
- ☐ Petition
- ☐ Petition to Convert to a Provisional Application
- ☐ Power of Attorney, Revocation Change of Correspondence Address
- ☐ Terminal Disclaimer
- ☐ Request for Refund
- ☐ CD, Number of CD(s) _____
  - ☐ Landscape Table on CD
- ☐ After Allowance Communication to TC
- ☐ Appeal Communication to Board of Appeals and Interferences
- ☐ Appeal Communication to TC **(Appeal Notice, Brief, Reply Brief)**
- ☐ Proprietary Information
- ☐ Status Letter
- ☐ Other Enclosure(s) (please identify below):

Remarks

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name	Ivor M. Hughes		
Signature			
Printed name	Neil H. Hughes		
Date	September 29, 2005	Reg. No.	33,636

CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:

Signature			
Typed or printed name		Date	

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: **Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

RECEIVED
CENTRAL FAX CENTER
SEP 2 9 2005

IN THE UNITED STATES PATENT OFFICE

Application Serial No. 10/311,814

Our Ref.: PT-1834033
CUSTOMER NO. 23607

Applicant: Apotex Inc.

Neil H. Hughes, P.Eng.
Ivor M. Hughes,
Barrister & Solicitor
Patent & Trademark Agents
Suite 200,
175 Commerce Valley Dr. W.
Thornhill, Ontario
Canada L3T 7P6

Title: A NEW USE FOR DEFERIPRONE

Inventors: Michael Spino and Antonio Piga

Group Art Unit: 1614

INFORMATION DISCLOSURE STATEMENT

September 28, 2005

VIA FACSIMILE (571-273-8300)

U.S. Patent and Trademark Office
Customer Service Window, Mail Stop Amendment
Randolph Building
401 Delany Street
Alexandria, VA 22314

Dear Sir:

Applicants and the undersigned are aware of "patents, publications, or other information" which they believe may be material to the examination of the above-identified application. Applicants have attached Form PTO/SB/08b pursuant to 37 C.F.R. §§ 1.97-1.99 and to the duty of disclosure set forth in 37. C.F.R. § 1.56.

Applicant authorizes the Commissioner to access Applicant's Agent's Deposit Account No. 08-3255 in the amount of **$180.00 US** in payment of the required fee for filing an Information Disclosure Statement. If there is any deficiency or surplusage of the fee required for this application, please obtain any such deficiency or credit the surplusage to Deposit Account 08-3255 and advise Applicants' Agent.

Although this Information Disclosure Statement identifies references which may be "material," it is not intended to constitute an admission that any patent, publication, or other information referred to is "prior art" (within the meaning of 35 U.S.C. §102 and §103) as to the

09/30/2005 SDIRETA1 00000058 083255 10311814

01 FC:1806 180.00 DA

invention disclosed and claimed in this application unless specifically designated as such. Moreover, no representation is intended as to the relative relevance of any portion of the references or as to the relevance among references, whether cited in this Statement or elsewhere.

In accordance with 37 C.F.R. §1.97(b), the filing of this Information Disclosure Statement shall not be construed to mean that a novelty search has been made or that no other information which may be material (as defined in 37 C.F.R. §1.56(a)) exists.

1. Anderson, Lisa J, et al., Comparison of effects of oral deferiprone and subcutaneous desferrioxamine on myocardial iron concentrations and ventricular function in beta-thalassaemia: Lancet 2002; 360: 516-520; and

2. Black's Law Dictionary, page 1502.

3. Butler, Craig, New York Academy of Sciences Symposium, The Eighth Cooley's Anemia Symposium was a valuable resource for medical professionals and patients; Cooley's Anemia Foundation Website: May 17, 2005;

4. U.S. Newswire, Cooley's Anemia Foundation Presents Symposium on Iron Overload and Cardiac Disease: New Interventions: December 10, 2004;

5. Barnabee et al., Deferiprone Protects Against Doxorubicin-Induced Myocyte Cytotoxicity, Free Radical Biology & Medicine 2002; Vol. 33, No. 2: pp. 266–275; and

6. Hasinoff et al., The Oral Iron Chelator ICL670A (Deferasirox) Does Not Protect Myocytes Against Doxorubicin, Free Radical Biology & Medicine 2003; Vol. 35, No. 11: pp. 1469–1479.

Full consideration of the material presented is appreciated.

Respectfully submitted,

Neil H. Hughes, P.Eng.
Registration No. 33,636
Agent for Applicant

NHH:lvp
Encls.

RECEIVED
CENTRAL FAX CENTER
SEP 2 9 2005

PTO/SB/08B (07-05)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 1 of 1

Complete if Known	
Application Number	10/311,814
Filing Date	April 4, 2003
First Named Inventor	Michael Spino
Art Unit	1614
Examiner Name	Raymond J. Henley III
Attorney Docket Number	PC-1834033

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.[1]	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T[2]
		ANDERSON, Lisa J, et al., Comparison of effects of oral deferiprone and subcutaneous desferrioxamine...in beta-thalassaemia: Lancet 2002; 360: pp. 516-520	
		Black's Law Dictionary, p. 1502	
		Butler, Craig, New York Academy of Sciences Symposium, The Eighth Cooley's Anemia Symposium...for medical professionals and patients; CAF Website; May 17, 2005	
		U.S. Newswire, Cooley's Anemia Foundation Presents Symposium on Iron Overload and Cardiac Disease: New Interventions: December 10, 2004	
		Barnabee et al., Deferiprone Protects Against Doxorubicin-Induced Myocyte Cytotoxicity, Free Radical Biology & Medicine 2002; Vol. 33, No. 2: pp. 266–275	
		Hasinoff et al., The Oral Iron Chelator ICL670A (Deferasirox) Does Not Protect Myocytes Against Doxorubicin, Free Radical Biology & Medicine 2003; Vol. 35, No.11: p. 1469–1479	

Examiner Signature		Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

RECEIVED
CENTRAL FAX CENTER
SEP 2 9 2005

IN THE UNITEDSTATES PATENT OFFICE

Patent Application Serial No.: 10/311,814

Our Ref: PC-1834033
CUSTOMER NO. 23607

Applicants: Apotex Inc.

Agent: Neil H. Hughes, P. Eng.
c/o Ivor M. Hughes
Barrister & Solicitor
Patent & Trade Mark Agents
Suite 200,
175 Commerce Valley Dr. W.
Thornhill, Ontario.
L3T 7P6, CANADA

Title: A NEW USE FOR DEFERIPRONE

Inventors: Michael Spino and Antonio Piga

Examiner: Raymond J. Henley III

Group Art Unit: 1614 **Due Date: September 29, 2005**

No. of Pages including this sheet: 40 (PART 2)

DELIVERED TO FACSIMILE NO. (571-273-8300)

September 29, 2005

RECEIVED
OIPE/IAP
SEP 3 0 2005

Commissioner of Patents
Customer Service Window, Mail Stop Amendment
Randolph Building
401 Dulany Street
Arlington, VA 22314

Dear Mr. Henley:

CERTIFICATION OF FACSIMILE TRANSMISSION

I hereby certify that this paper:
1) Supplementary Information Disclosure Statement dated September 29, 2005

is being facsimile transmitted to the United States Patent Office Facsimile No. (571) 273-8300 on the date shown below.

NEIL H. HUGHES
Agent for Applicant

Signature: _____ Date: September 29, 2005

Ivor M. Hughes
Barrister & Solicitor
Patent & Trade Mark Agents
Canada, United States

Barristers & Solicitors
Ivor M. Hughes
Rick Tuzi
Patent Agents
Neil H. Hughes, P.Eng.
Marcelo K. Sarkis, P.Eng.
Wm. Kitt Sinden
Samuel T. Tekie, P.Eng.

COPY

Our Ref.: PC-1834033

September 29, 2005

VIA FACSIMILE (571-273-8300)

United States Patent and Trademark Office
Customer Service Window, Mail Stop Amendment
Randolph Building
401 Dulany Street
Arlington VA 22314

Dear Sir:

Re: United States Patent Application No. 10/311,814
of Michael Spino and Antonio Spiga
for A NEW USE FOR DEFERIPRONE
Due Date: September 29, 2005

Please find enclosed herewith the following:

1. Transmittal Form;
2. Petition for Extension of Time Under 37 CFR 1.136(a);
2. Response to Examination Report dated March 29, 2005; and
3. Information Disclosure Statement with authorization to access deposit account No. 08-3255 for $180.00 US

If there should occur an overpayment of fees in respect of this submission, the Commissioner is authorized to access Deposit Account Number 08-3255 to make the appropriate adjustments and advise Applicant's agent.

Also enclosed herewith is a stamped, self-addressed verification card which we request that you kindly acknowledge and return to this office at the earliest opportunity.

We thank the Commissioner for his cooperation in this regard.

Respectfully submitted,

Neil H. Hughes, P.Eng.
Registration No. 33,636
Agent for Applicant

NHH:lvp
Encls.

BEST AVAILABLE COPY

175 Commerce Valley Dr. W., Suite 200, Thornhill, Ontario, Canada L3T 7P6 Phone: 905 771-6414 Fax: 905 771-6420
website: www.ivormhughes.com email: mail@ivormhughes.com

PATENT APPLICATION FEE DETERMINATION RECORD
Effective October 1, 2003

Application or Docket Number: 10/311814

CLAIMS AS FILED - PART I

	(Column 1)	(Column 2)
TOTAL CLAIMS		
FOR	NUMBER FILED	NUMBER EXTRA
TOTAL CHARGEABLE CLAIMS	47 minus 20=	* 27
INDEPENDENT CLAIMS	14 minus 3 =	* 11
MULTIPLE DEPENDENT CLAIM PRESENT		☐

* If the difference in column 1 is less than zero, enter "0" in column 2

SMALL ENTITY TYPE ☐		OR	OTHER THAN SMALL ENTITY	
RATE	FEE		RATE	FEE
BASIC FEE	385.00	OR	BASIC FEE	770.00
X$ 9=		OR	X$18=	486
X43=		OR	X86=	924
+145=		OR	+290=	280
TOTAL		OR	TOTAL	

CLAIMS AS AMENDED - PART II

12/8/04

AMENDMENT A	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA
Total	* 130	Minus	** 47	= 83
Independent	* 10	Minus	*** 14	= —
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM				☐

SMALL ENTITY		OR	OTHER THAN SMALL ENTITY	
RATE	ADDITIONAL FEE		RATE	ADDITIONAL FEE
X$ 9=		OR	X$18=	1494 4450
X43=		OR	X86=	
+145=		OR	+290=	
TOTAL ADDIT. FEE		OR	TOTAL ADDIT. FEE	4450 1494

9/29/05

AMENDMENT B	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA
Total	* 22	Minus	** 47	=
Independent	* 10	Minus	*** 14	=
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM				☐

RATE	ADDITIONAL FEE		RATE	ADDITIONAL FEE
X$ 9=		OR	X$18=	
X43=		OR	X86=	
+145=		OR	+290=	
TOTAL ADDIT. FEE		OR	TOTAL ADDIT. FEE	

AMENDMENT C	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA
Total	*	Minus	**	=
Independent	*	Minus	***	=
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM				☐

RATE	ADDITIONAL FEE		RATE	ADDITIONAL FEE
X$ 9=		OR	X$18=	
X43=		OR	X86=	
+145=		OR	+290=	
TOTAL ADDIT. FEE		OR	TOTAL ADDIT. FEE	

If the entry in column 1 is less than the entry in column 2, write "0" in column 3.
If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20."
If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3."
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

MULTIPLE DEPENDENT CLAIM FEE CALCULATION SHEET
(FOR USE WITH FORM PTO-875)

SERIAL NO. 10/311814 | FILING DATE

APPLICANT(S)

CLAIMS

	AS FILED		AFTER 1st AMENDMENT		AFTER 2nd AMENDMENT			*		*		*	
	IND.	DEP.	IND.	DEP.	IND.	DEP.		IND.	DEP.	IND.	DEP.	IND.	DEP.
1							51						
2							52						
3							53						
4							54						
5							55						
6							56						
7							57						
8							58						
9							59						
10							60						
11							61						
12							62						
13							63						
14							64						
15							65						
16							66						
17							67						
18							68						
19							69						
20							70						
21							71						
22							72						
23							73						
24							74						
25							75						
26							76						
27							77						
28							78						
29							79						
30							80						
31							81						
32							82						
33							83						
34							84						
35							85						
36							86						
37							87						
38							88						
39							89						
40							90						
41							91						
42							92						
43							93						
44							94						
45							95						
46							96						
47							97						
48							98						
49							99						
50							100						
TOTAL IND.							TOTAL IND.						
TOTAL DEP.							TOTAL DEP.	12					
TOTAL CLAIMS							TOTAL CLAIMS	10					
								22					

FOR DISCUSSION PURPOSES ONLY
NOT TO BE ENTERED ON THE RECORD

IN THE UNITEDSTATES PATENT OFFICE

Patent Application Serial No.: 10/311,814

Our Ref: PC-1834033
CUSTOMER NO. 23607

Applicants: Apotex Inc.

Agent: Neil H. Hughes, P. Eng.
c/o Ivor M. Hughes
Barrister & Solicitor
Patent & Trade Mark Agents
Suite 200,
175 Commerce Valley Dr. W.
Thornhill, Ontario.
L3T 7P6, CANADA

Title: A NEW USE FOR DEFERIPRONE

Inventors: Michael Spino and Antonio Piga

Examiner: Raymond J. Henley III

Group Art Unit: 1614

No. of Pages including this sheet: 3

DELIVERED TO FACSIMILE NO. (571-273-8300)

December 19, 2005

Commissioner of Patents
United States Patent and Trademark Office
Randolph Building
401 Dulany Street
Arlington, VA 22314

Attention: Raymond J. Henley III, Patent Examiner

Dear Examiner Henley:

CERTIFICATION OF FACSIMILE TRANSMISSION

I hereby certify that this paper:
1) Facsimile Reply to Examiner's Amendment In The Claims As Proposed By The U.S. Examiner dated December 19, 2005.

is being facsimile transmitted to the United States Patent Office Facsimile No. (571) 273-8300 on the date shown below.

NEIL H. HUGHES
Agent for Applicant

Signature: _____ Date: December 19, 2005

FOR DISCUSSION PURPOSES ONLY
NOT TO BE ENTERED ON THE RECORD

IN THE UNITED STATES PATENT OFFICE

Application Serial No. 10/311,814

Our Ref.: PC-1834033
CUSTOMER NO. 23607

Applicant: Apotex Inc.

Agent: Neil H. Hughes, P.Eng.
c/o Ivor M. Hughes
Barrister & Solicitor
Patent & Trade Mark Agents
Suite 200
175 Commerce Valley Dr. W.
Thornhill, Ontario
Canada L3T 7P6

Title: A NEW USE FOR DEFERIPRONE

Inventors: Michael Spino and Antonio Piga

Examiner: Raymond J. Henley III

Group Art Unit: 1614

FACSIMILE REPLY TO EXAMINER'S AMENDMENT
IN THE CLAIMS AS PROPOSED BY THE U.S. EXAMINER

December 19, 2005

VIA FACSIMILE (571-273-8300)

United States Patent and Trademark Office
Randolph Building
401 Dulany Street
Arlington VA 22314

Attention: Mr. Raymond J. Henley III

Dear Examiner Henley:

With respect to the Examiner's Amendment sent via facsimile on December 16, 2005 Applicant has the following comments which require clarification.

The Examiner first of all is thanked for his assistance and cooperation in the prosecution of this matter. After considering the Examiner's proposals Applicant only has a few questions in order to clarify the amendments.

For example, the Examiner has proposed in claim 1 to change "in a transfusion patient" to adding "blood" before transfusion. Applicant has taken this to mean that before ever occurrence of transfusion in the claims the word "blood" would be inserted in each of the claims because in fact the referenced section should read "in a blood transfusion dependent patient" at all occurrences including claim 2. Reference is made to the Examiner's proposal to claim 11 which is in fact correct.

With respect to claim 12 it is submitted in view of the fact that claim 12 refers to "patients" it would be incorrect to insert "in a blood transfusion". Otherwise the amendments as proposed is acceptable I'm sure.

Referring to claims 22, 23, 24 and 26 the Examiner has proposed to insert "normal" in claims 23, 24 and 26. The proposal is in fact not accurate for the following reason. The word "normal" respectfully should not appear in any of these claims since we are not referring to treatment of normal iron stores. The iron stores in a blood transfusion dependent patient having an iron overload condition would not have normal iron stores in the body. It is requested therefore that the Examiner reconsider his proposed amendment and that the word "normal" be removed from that proposal. It is presumed that the Examiner has some concern with the word "general" and as an alternative the word "general" could be removed entirely and the claim would just refer to iron stores per se in the body.

Once the Examiner has reviewed this reply he is asked to confirm whether he would be able to incorporate these comments into his Examiner's Amendment so that we might pursue obtaining our client's approval to proceed.

Thank you for your kind consideration.

If the Examiner has any questions, he is requested to contact Neil H. Hughes at (905) 771-6414.

Respectfully submitted,

Neil H. Hughes, P.Eng.
Registration No. 33,636
Agent for the Applicant

NHH/lvp

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

23607 7590 12/23/2005

IVOR M. HUGHES, BARRISTER & SOLICITOR,
PATENT & TRADEMARK AGENTS
175 COMMERCE VALLEY DRIVE WEST
SUITE 200
THORNHILL, ON L3T 7P6
CANADA

EXAMINER	
HENLEY III, RAYMOND J	
ART UNIT	**PAPER NUMBER**
1614	

DATE MAILED: 12/23/2005

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/311,814	04/04/2003	Michael Spino	PC-1834033	2281

TITLE OF INVENTION: USE FOR DEFERIPRONE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	$1400	$300	$1700	03/23/2006

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PTOL-85 (Rev. 07/05) Approved for use through 04/30/2007.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail **Mail Stop ISSUE FEE**
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax (571) 273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below-or directed otherwise-in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

23607 7590 12/23/2005

IVOR M. HUGHES, BARRISTER & SOLICITOR,
PATENT & TRADEMARK AGENTS
175 COMMERCE VALLEY DRIVE WEST
SUITE 200
THORNHILL, ON L3T 7P6
CANADA

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission
I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/311,814	04/04/2003	Michael Spino	PC-1834033	2281

TITLE OF INVENTION: USE FOR DEFERIPRONE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	$1400	$300	$1700	03/23/2006

EXAMINER	ART UNIT	CLASS-SUBCLASS
HENLEY III, RAYMOND J	1614	514-348000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).
☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list
(1) the names of up to 3 registered patent attorneys or agents OR, alternatively,
(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.
1 _____
2 _____
3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are enclosed:
☐ Issue Fee
☐ Publication Fee (No small entity discount permitted)
☐ Advance Order - # of Copies _____

4b. Payment of Fee(s):
☐ A check in the amount of the fee(s) is enclosed.
☐ Payment by credit card. Form PTO-2038 is attached.
☐ The Director is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)
☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.
☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

The Director of the USPTO is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above.
NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____ Date _____

Typed or printed name _____ Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/311,814	04/04/2003	Michael Spino	PC-1834033	2281

23607 7590 12/23/2005

IVOR M. HUGHES, BARRISTER & SOLICITOR,
PATENT & TRADEMARK AGENTS
175 COMMERCE VALLEY DRIVE WEST
SUITE 200
THORNHILL, ON L3T 7P6
CANADA

EXAMINER	
HENLEY III, RAYMOND J	
ART UNIT	**PAPER NUMBER**
1614	

DATE MAILED: 12/23/2005

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571) 272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

PTOL-85 (Rev. 07/05) Approved for use through 04/30/2007.

Notice of Allowability	Application No.	Applicant(s)	
	10/311,814	SPINO ET AL.	
	Examiner	Art Unit	
	Raymond J. Henley III	1614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *the papers filed September 29, 2005*.

2. ☒ The allowed claim(s) is/are *1,2,11-13,22-26,30-33,35,37,38,41,43,45,47 and 49*.

3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☐ All b) ☐ Some* c) ☐ None of the:
      1. ☒ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

The drawing filed April 4, 2003 is acceptable. TH

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 12/8/04 & 9/29/05
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date *12/16/2005*.
7. ☒ Examiner's Amendment/~~Comment~~
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

Raymond J Henley III
Primary Examiner
Art Unit: 1614

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Neil Hughes on December 16, 2005.

The application has been amended as follows, (note, the amendments below are in addition to those submitted to the Office on September 29, 2005):

In the Claims:

In claim 1, line 1, "in a transfusion dependent patient" has been changed to ---in a blood transfusion dependent patient".

In claim 2, line 2, "in a transfusion dependent patient" has been changed to ---in a blood transfusion dependent patient", at line 4, "treat" has been changed to ---reduce--- and at line 5, "accumulation" has been changed to ---overload---.

In claim 11, line 2 "transfusion dependent patients" has been changed to ----blood transfusion dependent patients---.

In claim 12, line 1, "in transfusion dependent" has been changed to ---in a blood transfusion, and at line 3, "treat iron burden" has been changed to ---treat the iron burden";

In claim 13, line 2, "in transfusion dependent patients" has been changed to ----in blood transfusion dependent patients---.

In claim 22, line 1, "a transfusion" has been changed to ---blood transfusion---.

In claim 23, line 2, "a transfusion dependent patients" has been changed to ---[a] blood transfusion dependent patients.

In claim 24, line 2 "transfusion dependent patients" has been changed to ---[a] blood transfusion dependent patients.

In claim 25, line 2, ---blood--- has been inserted before "transfusion".

In claim 26, line 1, "A method to treat" has been changed to ---A method to reduce---, and at line 2, "a transfusion dependent" has been changed to ---a blood transfusion dependent---.

Claims 31 and 32 have been deleted.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond J. Henley III whose telephone number is 571-272-0575. The examiner can normally be reached on M-F, 8:30 am to 4:00 pm Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Low can be reached on 571-272-0951. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Raymond J Henley III
Primary Examiner
Art Unit 1614

December 16, 2005

RECEIVED
CENTRAL FAX CENTER
SEP 2 9 2005

PTO/SB/08B (07-05)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 1 of 1

Complete if Known	
Application Number	10/311,814
Filing Date	April 4, 2003
First Named Inventor	Michael Spino
Art Unit	1614
Examiner Name	Raymond J. Henley III
Attorney Docket Number	PC-1834033

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.[1]	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T[2]
		ANDERSON, Lisa J, et al., Comparison of effects of oral deferiprone and subcutaneous desferrioxamine...in beta-thalassaemia: Lancet 2002; 360: pp. 516-520	
		Black's Law Dictionary, p. 1502	
		Butler, Craig, New York Academy of Sciences Symposium, The Eighth Cooley's Anemia Symposium...for medical professionals and patients; CAF Website; May 17, 2005	
		U.S. Newswire, Cooley's Anemia Foundation Presents Symposium on Iron Overload and Cardiac Disease: New Interventions: December 10, 2004	
		Barnabee et al., Deferiprone Protects Against Doxorubicin-Induced Myocyte Cytotoxicity, Free Radical Biology & Medicine 2002; Vol. 33, No. 2: pp. 266–275	
		Hasinoff et al., The Oral Iron Chelator ICL670A (Deferasirox) Does Not Protect Myocytes Against Doxorubicin, Free Radical Biology & Medicine 2003; Vol. 35, No.11: p. 1469–1479	

Examiner Signature		Date Considered	12/15/05

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: **Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

NOTE:
Entire IDS mailed
Because date (or lack thereof)
had to be included in references
Page #15 of 15, Last 3 references

CITATION OF PRIOR ART

FORM PTO-1449 (REV. 8-83) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. PC-1834033	APPLICATION SERIAL NO. 10/311,814
INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)	APPLICANT Apotex Inc.	
CUSTOMER NO. 23607	FILING DATE 04/04/2003	GROUP ART UNIT 1614

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

	Gabutti V, Piga A. Results of Long-Term Iron-Chelating Therapy. Acta Haematol 1996; 95:26-36.
	Wolfe LC, Olivieri NF, Sallan D, Colan S, Rose V, Propper RD et al. Prevention of cardiac disease by subcutaneous desferrioxamine in patients with thalassemia major. N Engl J Med 1985; 312(25): 1600-1603.
	Aldouri MA, Wonke B. Hoffbrand AV, Flynn DM, Ward SE, Agnew JE et al. High Incidence of Cardiomyopathy in Beta-Thalassemia Patients Receiving Regular Transfusion and Iron Chelation: Reversal by Intensified Chelation. Acta Haematol 1990; 84:113-117.
	Brittenham GM, Griffith PM, Nienhuis AW, McLaren CE, Young NS, Tucker EE et al. Efficacy of Desferrioxamine in Preventing Complications of Iron Overload in Patients with Thalassemia Major. N Engl J Med 1994; 331(9):567-573.
	Giardina PJV, Ehlers KH, Engle MA, Grady RW, Hilgartner MW. The Effect of Subcutaneous Desferrioxamine on the Cardiac Profile of Thalassemia Major: A Five-Year Study. Ann N Y Acad Sci 1985; 445:282-292.
	Borgna-Pignatti C, Rugologgo S, DeStefano P, Piga A, et al. Survival and Disease Complications in Thalassemia Major. Ann N Y Acad Sci 1998; 850:227-231.

EXAMINER	DATE CONSIDERED
[signature]	3/22/05

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

CITATION OF PRIOR ART

FORM PTO-1449 (REV. 8-83) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. PC-1834033	APPLICATION SERIAL NO. 10/311,814
INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)	APPLICANT Apotex Inc.	
CUSTOMER NO. 23607	FILING DATE 04/04/2003	GROUP ART UNIT 1614

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES	TRANSLATION NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

	Olivieri NF, Nathan DG, MacMillan JH, Wayne AS, Liu P, McGee A et al. Survival in Medically Treated Patients with Homozygous Beta-Thalassemia. N Engl J Med 1994; 331(9):574-578.
	Addis A, Loebstein R, Koren G, Einarson TR. Meta-analytic review of the clinical effectiveness of oral deferiprone (Deferiprone). Eur J Clin Pharmacol 1999; 55:1-6.
	Grady RW, Hilgartner MW, Giardina PJV. Deferiprone: Its Effectiveness Relative to that of Desferrioxamine. 6th International Conference on Thalassemia and the Haemoglobinopathies, Abstract #2. 1997.
	Olivieri NF, Brittenham GM, Armstrong SAM, Basran RK, Daneman R, Daneman N et al. First Prospective Randomized Trial of the Iron Chelators Deferiprone (Deferiprone) and Deferoxamine. Blood 86[10 Suppl. 1], 249a. 1995.

EXAMINER	DATE CONSIDERED
	3/22/05

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

CITATION OF PRIOR ART

FORM PTO-1449 (REV. 8-83) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. PC-1834033	APPLICATION SERIAL NO. 10/311,814
INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)	APPLICANT Apotex Inc.	
CUSTOMER NO. 23607	FILING DATE 04/04/2003	GROUP ART UNIT 1614

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

		Olivieri NF, Belluzzo N, Muraca M, MacKenzie CC, Milone S, Polsinelli K et al. Evidence of Reduction in Hepatic, Cardiac and Pituitary Iron Stores in Patients with Thalassemia Major During Long-Term Therapy with the Orally Active Iron Chelating Agent Deferiprone. Blood 84[10 Suppl. 1], 109a. 1994.
		Link G, Konijin AM, Hershko C. Cardioprotective effect of alpha-tocopherol, ascorbate, desferrioxamine, and deferiprone: mitochondrial function in cultured, iron-loaded heart cells. J Lab Clin Med 1999; 133: 179-188.
		De Franceschi L, Shalev O, Piga A, Collell M, Olivieri O, Corrocher R et al. Deferiprone therapy in homozygous human beta-thalassemia removes erythrocyte membrane free iron and reduces KCl contransport activity. J Lab Clin Med 1999; 133:64-69.
		Carthew P, Smith AG, Hider RC, Dorman B, Edwards RE, Francis JE. Potentiation of iron accumulation in cardiac myocytes during the treatment of iron overload in gerbils with the hydroxypridinone iron chelator CP94. Biometals 1994; 7:267-271.

EXAMINER	DATE CONSIDERED
	3/22/05

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

CITATION OF PRIOR ART

FORM PTO-1449 (REV. 8-83) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. PC-183486	APPLICATION SERIAL NO. 10/311,814
INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)	APPLICANT Apotex Inc.	
CUSTOMER NO. 23607	FILING DATE 04/04/2003	GROUP ART UNIT 1614

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

		Hider RC, Kayyli R, Evans P, Mackinnon S. The production of Hydroxyl Radicals by Deferiprone-iron compounds under physiological conditions. Blood 94[10], 406a. 1999.
		Engle MA, Erlandson M, Smith CH. Late Cardiac Complications of Chronic, Severe, Refractory Anemia with Hemochromatosis. Circulation 1964; 30:698-705.
		The Criteria Committee of the New York Heart Association. Nomenclature and Criteria for Diagnosis of Disease of the heart and Great Vessels. 9th ed. Boston, Mass; Little, Brown & Co; 1994:253-255.
		Sirchia G, Zanella A. A Short Guide to the Management of Thalassemia. Thalassemia Today: the Mediterranean Experience. 1987: 635-670.

EXAMINER	DATE CONSIDERED
	3/22/05

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

CITATION OF PRIOR ART

FORM PTO-1449 (REV. 8-83) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. PC-1834033	APPLICATION SERIAL NO. 10/311,814
INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)	APPLICANT Apotex Inc.	
CUSTOMER NO. 23607	FILING DATE 04/04/2003	GROUP ART UNIT 1614

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

		Hider RC, Kayyli R, Evans P, Mackinnon S. The production of Hydroxyl Radicals by Deferiprone-iron compounds under physiological conditions. Blood 94[10], 406a. 1999.
		Engle MA, Erlandson M, Smith CH. Late Cardiac Complications of Chronic, Severe, Refractory Anemia with Hemochromatosis. Circulation 1964; 30:698-705.
		The Criteria Committee of the New York Heart Association. Nomenclature and Criteria for Diagnosis of Disease of the heart and Great Vessels. 9th ed. Boston, Mass; Little, Brown & Co; 1994:253-255.
		Sirchia G, Zanella A. A Short Guide to the Management of Thalassemia. Thalassemia Today: the Mediterranean Experience. 1987: 635-670.

EXAMINER	DATE CONSIDERED
	3/22/05

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

CITATION OF PRIOR ART

FORM PTO-1449 (REV. 8-83) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. PC-1834033	APPLICATION SERIAL NO. 10/311,814
INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)	APPLICANT Apotex Inc.	
CUSTOMER NO. 23607	FILING DATE 04/04/2003	GROUP ART UNIT 1614

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

		Berdoukas V, Bohans T. The Effect of Liver Iron on Cardiac Function. 10th International Conference on Oral Chelators in the treatment of Thalassemia and other diseases and Biomed Meeting 10, 13. 2000.
		Hershko C, Graham G, Bates GW, Rachmilewitz EA. Non-Specific Serum Iron in Thalassemia: an Abnormal Serum Iron Fraction of Potential Toxicity. Br J Haematol 1978; 40: 255-263.
		Olivieri NF, Koren G, Matsui D, Liu P, Blendis L, Cameron R et al. Reduction of Tissue Iron Stores and Normalization of Serum Ferritin During Treatment with the Oral Iron Chelator Deferiprone in Thalassemia Intermedia. Blood 1992; 79(10):2741-2748.
		Al-Refaie FN, Sheppard L, Nortey P, Wonke B, Hoffbrand AV. Pharmacokinetics of the Oral Iron Chelator Deferiprone (Deferiprone) in Patients with Iron Overload. Br J Haematol 1995; 89:403-408.

EXAMINER	DATE CONSIDERED
	3/22/05

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

CITATION OF PRIOR ART

FORM PTO-1449 (REV. 8-83) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. PC-1834033	APPLICATION SERIAL NO. 10/311,814
INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)	APPLICANT Apotex Inc.	
CUSTOMER NO. 23607	FILING DATE 04/04/2003	GROUP ART UNIT 1614

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

		Novartis Marketing Brochure on Desferal (Desferrioxamine). 1998. Switzerland, Novartis Pharma AG.
		Grady RW, Berdoukas VA, Rachmilewitz EA, Giardina PJ. Combining Deferiprone and Desferrioxamine to optimize Chelation. 10th International Conference on Oral Chelators in the treatment of Thalassemia and other diseases and Biomed Meeting, Limassol, Cyprus Page 9. March 2000.
		Töndury P, Zimmermann A, Nielsen P, Hirt A. Liver iron and fibrosis during long-term treatment with deferiprone in Swiss thalassaemic patients. Br. J. Haematol. 1998;101(3):413-5.
		Olivieri NF, Brittenham GM, McLaren CE, Templeton DM, Cameron RG, McClelland RA et al. Long-term safety and effectiveness of iron-chelation therapy with deferiprone for thalassemia major. N Engl J Med 1998; 339(7):417-423.

EXAMINER	DATE CONSIDERED
	3/22/05

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

CITATION OF PRIOR ART

FORM PTO-1449 (REV. 8-83) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. PC-1834033	APPLICATION SERIAL NO. 10/311,814
INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)	APPLICANT Apotex Inc.	
CUSTOMER NO. 23607	FILING DATE 04/04/2003	GROUP ART UNIT 1614

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES	TRANSLATION NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

		Hoffbrand AV, Al-Refaie FN, Davis B, Siritanakatkul N, Jackson BFA, Cochrane J et al. Long-Term Trial of Deferiprone in 51 Transfusion-Dependent Iron Overloaded Patients. Blood 1998; 91(1):295-300.
		Olivieri NF, Butany J, Templeton DM, Brittenham GM. Cardiac Failure and Myocardial Fibrosis in a patient with Thalassemia Major (TM) Treated with Long-Term Deferiprone. Blood 92[10 (Suppl 1)], 532a. 1998.
		Cohen AR, Galanello R, Piga A, DiPalma A, Vullo C, Tricta F. Safety profile of the oral iron chelator deferiprone: a multicentre study. Br J Haematol 2000; 108:305-312.
		Agarwal MB, Rajadhyaksha G, Munot S. Deferiprone: A report of 22 patients who have taken it for over a decade. 10th International Conference on Oral chelators in the Treatment of Thalassemia and other Diseases and Biomed Meeting, Limassol, Cyprus, Page 3. March 2000.
		Liu P. Personal letter from Dr. Liu on reversal of the heart failure in a patient with thalassemia treated with deferiprone. May 13, 1996.

EXAMINER	DATE CONSIDERED
	3/22/05

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

CITATION OF PRIOR ART

FORM PTO-1449 (REV. 8-83) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. PC-1834033	APPLICATION SERIAL NO. 10/311,814
INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)	APPLICANT Apotex Inc.	
CUSTOMER NO. 23607	FILING DATE 04/04/2003	GROUP ART UNIT 1614

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES	TRANSLATION NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

		Ramm GA, Britton RS, Brunt EM, O'Neill R, Bacon BR. Hepatic iron overload in pathogen-free gerbils does not result in bridging fibrosis or cirrhosis. Bioiron'99, P. 327. 1999.
		Hershko C., Link G., Konijn A. M. Relative effectiveness of desferrioxamine and deferiprone in protecting iron-loaded Gerbils from non-transferrin bound iron (NTBI) toxicity. Blood 94 (10): 422a; 1999.
		Porter JB. Evaluation of New Iron Chelators for Clinical Use. Acta Haematol 1996; 95:13-25.
		Al-Refaie FN, Hershko C, Hoffbrand AV, Kosaryan M, Olivieri NF, Töndury P et al. Results of Long-Term Deferiprone (Deferiprone) Therapy: A Report by the International Study Group on Oral Iron Chelators. Br J Haematol 1995; 91:224-229.
		G. Link, A. Pinson, and C. Hershko. Ability of the orally effective iron chelators dimethyl- and diethyl-hydroxypyrid-4-one and of deferoxamine to restore sarcolemmal thiolic enzyme activity in iron-loaded heart cells. *Blood* 83 (9):2692-2697, 1994.

EXAMINER	DATE CONSIDERED
[signature]	3/22/05

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

CITATION OF PRIOR ART

FORM PTO-1449 (REV. 8-83) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTORNEY DOCKET NO. PC-1834033	APPLICATION SERIAL NO. 10/311,814
INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)	APPLICANT Apotex Inc.	
CUSTOMER NO. 23607	FILING DATE 04/04/2003	GROUP ART UNIT 1614

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

		J. B. Porter, K. P. Hoyes, R. D. Abeysinghe, P. N. Brooks, E. R. Huehns, and R. C. Hider. Comparison of the Subacute Toxicity and Efficacy of 3-Hydroxypyridin-4-One Iron Chelators in Overloaded and Nonoverloaded Mice. *Blood* 78 (10):2727-2734, 1991.
		G. R. Gale, W. H. Litchenberg, A. B. Smith, P. K. Singh, R. A. Campbell, and M. M. Jones. Comparative iron mobilizing actions of deferoxamine, 1,2- dimethyl-3-hydroxypyrid-4-one, and pyridoxal isonicotinoyl hydrazone in iron hydroxamate-loaded mice. *Res.Commun.Chem.Pathol.Pharmacol.* 73 (3):299-313, 1991.
		C. Hershko, G. Link, A. Pinson, H. H. Peter, P. Dobbin, and R. C. Hider. Iron Mobilization From Myocardial Cells by 3-Hydroxypyridin-4-One Chelators: Studies in Rat Heart Cells in Culture. *Blood* 77 (9):2049-2053, 1991.
		M. van der Kraaij, H. G. Van Eijk, and J. F. Koster. Prevention of postischemic cardiac injury by the orally active iron chelator 1,2-dimethyl-3-hydroxy-4-pyridone (L1) and the antioxidant (+)-cyanidanol-3. *Circulation* 80 (1):158-164, 1989.
		Y. Aydinok, G. Nisli, K. Kavakli, C. Coker, M. Kantar, and N. Cetingul. Sequential use of deferiprone and desferrioxamine in primary school children with thalassaemia major in Turkey. *Acta Haematol.* 102 (1):17-21, 1999.

EXAMINER	DATE CONSIDERED
	3/22/05

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

CITATION OF PRIOR ART

FORM PTO-1449 (REV. 8-83) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. PC-1834033	APPLICATION SERIAL NO. 10/311,814
INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)	APPLICANT Apotex Inc.	
CUSTOMER NO. 23607	FILING DATE 04/04/2003	GROUP ART UNIT 1614

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES	TRANSLATION NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

		G. Faa and G. Crisponi. Iron chelating agents in clinical practice. *Coordination Chemistry Reviews* 184:291-310, 1999.
		D. Kaul and S. Venkataram. Sustained release tablet formulation for a new iron chelator. *Drug Dev.Indust.Pharm.* 18 (9):1023-1035, 1992.
		M. A. Barradas, J. Y. Jeremy, G. J. Kontoghiorghes, D. P. Mikhailidis, A. V. Hoffbrand, and P. Dandona. Iron chelators inhibit human platelet aggregation, thromboxane A2 synthesis and lipoxygenase activity. *FEBS Lett.* 245 (1,2):105-109, 1989.
		Maria Stearns.Drug for Iron Overload Passes Major Safety Hurdle; May Benefit Patients with Thalassemia and Other Blood Disorders. *1995-2000 ScienceDaily Magazine.*
		Nancy F. Olivieri and Gary M. Brittenham. Long-Term Trials of Deferiprone in Cooley's Anemia. *The Departments of Medicine and Pediatrics The Hospital for Sick Children, Division of Hematology, University of Toronto, Canada (N.F.O.) Sept. 27, 1999.*

EXAMINER	DATE CONSIDERED
	3/22/05

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

CITATION OF PRIOR ART

FORM PTO-1449 (REV. 8-83) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. [illegible]4033	APPLICATION SERIAL NO. 10/311,814
INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)	APPLICANT Apotex Inc.	
CUSTOMER NO. 23607	FILING DATE 04/04/2003	GROUP ART UNIT 1614

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES	TRANSLATION NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

		N. F. Olivieri and G. Brittenham. Long-Term Trials of Deferiprone in Cooley's Anemia. *Ann.N.Y.Acad.Sci.* 80:217-222, 1998.
		Kontoghiorghes GJ, Aldouri MA, Sheppard L, Hoffbrand AV. 1,2-Dimethyl-3-hydroxypyrid-4-one, an orally active chelator for treatment of iron overload. Lancet. 1987 Jun 6;1(8545):1294-5
		Nathan DG. An orally active iron chelator. N Engl J Med. 1995 Apr 6;332(14):953-4.
		Olivieri NF, Brittenham GM, Matsui D, Berkovitch M, Blendis LM, Cameron RG, McClelland RA, Liu PP, Templeton DM, Koren G. Iron-chelation therapy with oral deferiprone in patients with thalassemia major. N Engl J Med. 1995 Apr 6;332(14):918-22.
		Biochimica et biophysica acta molecular basis of disease. v1500 n3 (Mar 17, 2000) : p342-348. (Please note this reference is the same as *Biochimica et biophysica acta molecular basis of disease;* V.1500; No. 3; March 17/00; pp 342-348 - (Reference 59)).

EXAMINER	DATE CONSIDERED
[signature]	3/22/05

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

CITATION OF PRIOR ART

FORM PTO-1449 (REV. 8-83) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. PC-1834033	APPLICATION SERIAL NO. 10/311,814
INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)	APPLICANT Apotex Inc.	
CUSTOMER NO. 23607	FILING DATE 04/04/2003	GROUP ART UNIT 1614

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

		Cohen AR, Martin MB. Iron chelation with oral deferiprone in patients with thalassemia. N Engl J Med. 1998 Dec 3;339(23):1713-4.
		Grady RW, Giardina PJ. Iron chelation with oral deferiprone in patients with thalassemia. N Engl J Med. 1998 Dec 3;339(23):1712-3.
		Wonke B, Telfer P, Hoffbrand AV. Iron chelation with oral deferiprone in patients with thalassemia. N Engl J Med. 1998 Dec 3;339(23):1712.
		Stella M, Pinzello G, Maggio A. Iron chelation with oral deferiprone in patients with thalassemia. N Engl J Med. 1998 Dec 3;339(23):1712.
		Callea F. Iron chelation with oral deferiprone in patients with thalassemia. N Engl J Med. 1998 Dec 3;339(23):1710-1.

EXAMINER	DATE CONSIDERED
	3/22/05

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

CITATION OF PRIOR ART

FORM PTO-1449 (REV. 8-83) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. PC-1834033	APPLICATION SERIAL NO. 10/311,814
INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)	APPLICANT Apotex Inc.	
CUSTOMER NO. 23607	FILING DATE 04/04/2003	GROUP ART UNIT 1614

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

		Tricta F, Spino M. Iron chelation with oral deferiprone in patients with thalassemia. N Engl J Med. 1998 Dec 3;339(23):1710.
		Hershko C., Link G., and Ioav C.. Pathophysiology of Iron Overload. *Ann.N.Y.Acad.Sci.* 850:191-201, 1998.
		Mumby, S., Chaturvedi, R.R., Brierley, J., Lincoln, C., Petros, A., Redington, A.N., Gutteridge, J.M.C.. Iron overload in paediatrics undergoing cardiopulmonary bypass. Biochimica et biophysica acta molecular basis of disease: v1500 n3 (Mar 17, 2000): p342-348
		Y. Tung, F. J. Farrell, T. M. McCashland, R. G. Gish, B. R. Bacon, E. B. Keeffe, and K. V. Kowdley. Long-term follow-up after liver transplantation in patients with hepatic iron overload. *Liver Transpl.Surg.* 5:369-374, 1999.
		Telfer PT, Prestcott E, Hoden S, Walker M, Hoffbrand AV, Wonke B. Hepatic iron concentration combined with long-term monitoring of serum ferritin to predict complicaitons of iron overload in thalassaemia major [In Process Citation]. Br J Haematol 2000; 110(4):971-977.
		Wonke B, Anderson L, Pennell D.J. Iron Chelation Treatment Based on Magnetic Resonance Imaging (MRI) in B-Thalassaemia Major. [Abstract] 11th International Conference on Oral Chelation, Catania, Italy, Pages 61-65, 2001.

EXAMINER	DATE CONSIDERED
	3/22/05

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

CITATION OF PRIOR ART

FORM PTO-1449 (REV. 8-83) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. PC-1834033	APPLICATION SERIAL NO. 10/311,814
INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)	APPLICANT Apotex Inc.	
CUSTOMER NO. 23607	FILING DATE 04/04/2003	GROUP ART UNIT 1614

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

		Diav-Citrin et al., 1997, Oral iron chelation with Deferiprone, Clinics of North America, (1997 Feb) 44 (1) 235-47. Ref. 75,XP001030553
		Gabriella Link et al., Cardioprotective effect of α-tocopherol, ascorbate, deferoxamine, and deferiprone: Mitochondrial function in cultered, iron-loaded heart cells, J. Lab Clin. Med., 133(2), p. 179-183 (1999)
		B. Wonke et al., Combined Therapy with Deferiprone and Desferrioxamine, British Journal of Haematology, 103, P361-183 (1998)
		Orna Diav-Citrin et al., Oral Iron Chelation with Deferprone, New Frontiers in Pediatric Drug Therapy, 44(1) P235-247 ?1997

EXAMINER	DATE CONSIDERED
	3/22/05

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Examiner-Initiated Interview Summary	Application No.	Applicant(s)	
	10/311,814	SPINO ET AL.	
	Examiner	Art Unit	
	Raymond J. Henley III	1614	

All Participants:

(1) *Raymond J. Henley III*.

(2) *Neil Hughes*.

Status of Application: *Pending*

(3) _____.

(4) _____.

Date of Interview: *16 December 2005*

Time: *PM (E.D.T.)*

Type of Interview:
☒ Telephonic
☐ Video Conference
☐ Personal (Copy given to: ☐ Applicant ☐ Applicant's representative)

Exhibit Shown or Demonstrated: ☒ Yes ☐ No
If Yes, provide a brief description: *Proposed Examiner's Amendment.*

Part I.

Rejection(s) discussed:
None

Claims discussed:
All

Prior art documents discussed:
None

Part II.

SUBSTANCE OF INTERVIEW DESCRIBING THE GENERAL NATURE OF WHAT WAS DISCUSSED:
Authorization Given for Examiner's Amendment.

Part III.

☒ It is not necessary for applicant to provide a separate record of the substance of the interview, since the interview directly resulted in the allowance of the application. The examiner will provide a written summary of the substance of the interview in the Notice of Allowability.

☐ It is not necessary for applicant to provide a separate record of the substance of the interview, since the interview did not result in resolution of all issues. A brief summary by the examiner appears in Part II above.

(Examiner/SPE Signature) (Applicant/Applicant's Representative Signature – if appropriate)

Issue Classification	Application/Control No.	Applicant(s)/Patent under Reexamination	
	10/311,814	SPINO ET AL.	
	Examiner	Art Unit	
	Raymond J. Henley III	1614	

ISSUE CLASSIFICATION

ORIGINAL		CROSS REFERENCE(S)	
CLASS	SUBCLASS	CLASS	SUBCLASS (ONE SUBCLASS PER BLOCK)
514	348	514	616

INTERNATIONAL CLASSIFICATION
A61K 31/44
A61K 31/16
/
/
/

N/A (Assistant Examiner) (Date)	Raymond J. Henley III Art Unit 1614	Total Claims Allowed: 22
Pittman (Legal Instruments Examiner) 12/20/05 (Date)	(Primary Examiner) 12/16/05 (Date)	O.G. Print Claim(s): 1 / O.G. Print Fig.: N/A

☒ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original
	1		31		61		91		121		151		181
	2		32		62		92		122		152		182
	3		33		63		93		123		153		183
	4		34		64		94		124		154		184
	5		35		65		95		125		155		185
	6		36		66		96		126		156		186
	7		37		67		97		127		157		187
	8		38		68		98		128		158		188
	9		39		69		99		129		159		189
	10		40		70		100		130		160		190
	11		41		71		101		131		161		191
	12		42		72		102		132		162		192
	13		43		73		103		133		163		193
	14		44		74		104		134		164		194
	15		45		75		105		135		165		195
	16		46		76		106		136		166		196
	17		47		77		107		137		167		197
	18		48		78		108		138		168		198
	19		49		79		109		139		169		199
	20		50		80		110		140		170		200
	21		51		81		111		141		171		201
	22		52		82		112		142		172		202
	23		53		83		113		143		173		203
	24		54		84		114		144		174		204
	25		55		85		115		145		175		205
	26		56		86		116		146		176		206
	27		57		87		117		147		177		207
	28		58		88		118		148		178		208
	29		59		89		119		149		179		209
	30		60		90		120		150		180		210

Search Notes

Application No.	Applicant(s)	
10/311,814	SPINO ET AL.	
Examiner	**Art Unit**	
Raymond J. Henley III	1614	

SEARCHED

Class	Subclass	Date	Examiner
514	348	2/2/2004	RJH
↓	616	↓	↓
updated		9/2/04	TB
updated		3/22/05	A
	See Search Notes		

SEARCH NOTES (INCLUDING SEARCH STRATEGY)

	DATE	EXMR
STN Search: CAPLUS, USPATFULL, MEDLINE	2/2/2004	RJH
Palm Inventor Name Search: - Michael Spino - Antonio Piga	↓	↓
updated updated	9/2/04 3/22/05	TB A
Claims classified in 514/348, 616 See notes	12/14/05 ↓	D ↓

INTERFERENCE SEARCHED

Class	Subclass	Date	Examiner
See INTERFERENCE Search Notes Attached			

U.S. Patent and Trademark Office

Part of Paper No. 02032004

Searchable Copy

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail **Mail Stop ISSUE FEE**
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax (571) 273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

23607 7590 12/23/2005

IVOR M. HUGHES, BARRISTER & SOLICITOR
PATENT & TRADEMARK AGENTS
175 COMMERCE VALLEY DRIVE WEST
SUITE 200
THORNHILL, ON L3T 7P6
CANADA

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission
I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/311,814	04/04/2003	Michael Spino	PC-1834033	2281

TITLE OF INVENTION: USE FOR DEFERIPRONE

01/09/2006 HBEYENE2 00000027 10311814

01 FC:1501 1400.00 OP
02 FC:1504 OP

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	$1400	$300	$1700	03/23/2006

EXAMINER	ART UNIT	CLASS-SUBCLASS
HENLEY III, RAYMOND J	1614	514-348000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).
☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list
(1) the names of up to 3 registered patent attorneys or agents OR, alternatively,
(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 Neil H. Hughes
2 Ivor M. Hughes
3 Marcelo K. Sarkis

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE: Apotex Inc.

(B) RESIDENCE: (CITY and STATE OR COUNTRY): Weston, Ontario, Canada

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☒ Corporation or other private group entity ☐ Government

4a. The following fee(s) are enclosed:
☒ Issue Fee
☒ Publication Fee (No small entity discount permitted)
☐ Advance Order - # of Copies _____

4b. Payment of Fee(s):
☒ A check in the amount of the fee(s) is enclosed.
☐ Payment by credit card. Form PTO-2038 is attached.
☒ The Director is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number 08-3255 (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)
☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.
☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

The Director of the USPTO is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above.
NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____ Date January 5, 2006

Typed or printed name Neil H. Hughes Registration No. 33,636

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

COPY

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

23607 7590 12/23/2005

IVOR M. HUGHES, BARRISTER & SOLICITOR
PATENT & TRADEMARK AGENTS
175 COMMERCE VALLEY DRIVE WEST
SUITE 200
THORNHILL, ON L3T 7P6
CANADA

EXAMINER	
HENLEY III, RAYMOND J	
ART UNIT	PAPER NUMBER
1614	

DATE MAILED: 12/23/2005

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/311,814	04/04/2003	Michael Spino	PC-1834033	2281

TITLE OF INVENTION: USE FOR DEFERIPRONE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	$1400	$300	$1700	03/23/2006

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PTOL-85 (Rev. 07/05) Approved for use through 04/30/2007.

Ivor M. Hughes

Barrister & Solicitor

Patent & Trade Mark Agents
Canada, United States

Barristers & Solicitors
Ivor M. Hughes
Rick Tuzi

Patent Agents
Neil H. Hughes, P.Eng.
Marcelo K. Sarkis, P.Eng.
Wm. Kitt Sinden
Samuel T. Tekie, P.Eng.
Francis Ng-Cheng-Hin

Our Ref: PC-1834033

January 5, 2006

VIA COURIER

United States Patent and Trademark Office
Customer Service Window, Mail Stop Issue Fee
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Dear Sir:

Re: United States Patent Application Serial No. 10/311,814
Assignee: Apotex Inc.
Inventors: Michael Spino and Antonio Piga
for A NEW USE FOR DEFERIPRONE
Filed: April 4, 2003 Group Art Unit: 1614
Confirmation No: 2281
Due Date: March 23, 2006 CUSTOMER NO. 23607

Pursuant to the Notice of Allowance dated December 23, 2005, a copy of which Notice is enclosed herewith for your reference, Applicant respectfully submits herewith a cheque in the amount of **$1700.00 USD** made payable to **"The Commissioner of Patents"** which includes the issue fee of ($1400.00) and the publication fee of ($300.00) for a **large** entity. Should there occur an overpayment or an underpayment of fees in respect of this application, the Commissioner is authorized to access Deposit Account Number 08-3255 to make the appropriate adjustments.

Applicant also submits a completed PTOL-85 Issue Fee Transmittal Form.

Also enclosed herewith is a stamped, self-addressed verification card which we request that you kindly acknowledge and return to this office at the earliest opportunity.

We thank the Commissioner for his cooperation in this regard and look forward to obtaining an issue notification in this regard.

Respectfully submitted,

Neil H. Hughes, P. Eng.
Registration No. 33,636
Agent for Applicant

NHH/lvp
Encls.

175 Commerce Valley Dr. W., Suite 200, Thornhill, Ontario, Canada L3T 7P6 Phone: 905 771-6414 Fax: 905 771-6420
website: www.ivormhughes.com email: mail@ivormhughes.com

Issue Classification	Application/Control No.	Applicant(s)/Patent under Reexamination	
	10/311,814	SPINO ET AL.	
	Examiner	Art Unit	
	Raymond J. Henley III	1614	

ISSUE CLASSIFICATION

ORIGINAL		CROSS REFERENCE(S)							
CLASS	SUBCLASS	CLASS	SUBCLASS (ONE SUBCLASS PER BLOCK)						
514	348	514	616						
INTERNATIONAL CLASSIFICATION									
A61K	31/44								
A61K	31/16								
	/								
	/								
	/								

N/A
(Assistant Examiner) (Date)

(Legal Instruments Examiner) 12/20/05 (Date)

Raymond J. Henley III
Art Unit 1614

(Primary Examiner) 12/16/05 (Date)

20
Total Claims Allowed: ~~22~~

O.G. Print Claim(s)	O.G. Print Fig.
1	N/A

☒ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

Final	Original	Final	Original	Final	Original	Final	Original	Final	Original
1	1		31		61		91		121		151		181
2	2		32		62		92		122		152		182
	3	12	33		63		93		123		153		183
	4		34		64		94		124		154		184
	5	13	35		65		95		125		155		185
	6		36		66		96		126		156		186
	7	14	37		67		97		127		157		187
	8		38		68		98		128		158		188
	9	15	39		69		99		129		159		189
	10		40		70		100		130		160		190
3	11	16	41		71		101		131		161		191
4	12		42		72		102		132		162		192
5	13	13	43		73		103		133		163		193
	14		44		74		104		134		164		194
	15	18	45		75		105		135		165		195
	16		46		76		106		136		166		196
	17	19	47		77		107		137		167		197
	18		48		78		108		138		168		198
	19	20	49		79		109		139		169		199
	20		50		80		110		140		170		200
	21		51		81		111		141		171		201
6	22		52		82		112		142		172		202
7	23		53		83		113		143		173		203
8	24		54		84		114		144		174		204
9	25		55		85		115		145		175		205
10	26		56		86		116		146		176		206
	27		57		87		117		147		177		207
	28		58		88		118		148		178		208
	29		59		89		119		149		179		209
11	30		60		90		120		150		180		210

PTO/SB/80 (11-08)
Approved for use through 11/30/2011. OMB 0651-0035
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

POWER OF ATTORNEY TO PROSECUTE APPLICATIONS BEFORE THE USPTO

I hereby revoke all previous powers of attorney given in the application identified in the attached statement under 37 CFR 3.73(b).

I hereby appoint:

☑ Practitioners associated with the Customer Number: 134997

OR

☐ Practitioner(s) named below (if more than ten patent practitioners are to be named, then a customer number must be used):

Name	Registration Number	Name	Registration Number

as attorney(s) or agent(s) to represent the undersigned before the United States Patent and Trademark Office (USPTO) in connection with any and all patent applications assigned only to the undersigned according to the USPTO assignment records or assignment documents attached to this form in accordance with 37 CFR 3.73(b).

Please change the correspondence address for the application identified in the attached statement under 37 CFR 3.73(b) to:

☑ The address associated with Customer Number: 134997

OR

☐ Firm or Individual Name	Goodmans LLP				
Address	Bay Adelaide Centre, 333 Bay Street, Suite 3400				
City	Toronto	State	ON	Zip	L6B 1B6
Country	Canada				
Telephone	416-979-2211	Email			

Assignee Name and Address:

Apotex Technologies Inc.
150 Signet Drive
Toronto, Ontario M9L 1T9 CANADA

A copy of this form, together with a statement under 37 CFR 3.73(b) (Form PTO/SB/96 or equivalent) is required to be filed in each application in which this form is used. The statement under 37 CFR 3.73(b) may be completed by one of the practitioners appointed in this form if the appointed practitioner is authorized to act on behalf of the assignee, and must identify the application in which this Power of Attorney is to be filed.

SIGNATURE of Assignee of Record
The individual whose signature and title is supplied below is authorized to act on behalf of the assignee

Signature		Date	11/06/2015
Name	Dr. Bernard Sherman	Telephone	416-749-9300
Title	Director & President		

This collection of information is required by 37 CFR 1.31, 1.32 and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

PTO/SB/96 (07-09)
Approved for use through 07/31/2012. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

STATEMENT UNDER 37 CFR 3.73(b)

Applicant/Patent Owner: Apotex Technologies Inc.

Application No./Patent No.: 10/311,814 / 7,049,328 Filed/Issue Date: April 4, 2003 / May 23, 2006

Titled: USE FOR DEFERIPRONE

Apotex Technologies, Inc. , a corporation

(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.

states that it is:

1. ☒ the assignee of the entire right, title, and interest in;

2. ☐ an assignee of less than the entire right, title, and interest in (The extent (by percentage) of its ownership interest is _____ %); or

3. ☐ the assignee of an undivided interest in the entirety of (a complete assignment from one of the joint inventors was made) the patent application/patent identified above, by virtue of either:

A. ☐ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy therefore is attached.

OR

B. ☒ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as follows:

1. From: Inventors (Antonio Piga and Michael Spino) To: Apotex Inc.
   The document was recorded in the United States Patent and Trademark Office at
   Reel 018013, Frame 0236, or for which a copy thereof is attached.

2. From: Apotex Inc. To: Apotex Technologies Inc.
   The document was recorded in the United States Patent and Trademark Office at
   Reel 018026, Frame 0603, or for which a copy thereof is attached.

3. From: _____ To: _____
   The document was recorded in the United States Patent and Trademark Office at
   Reel _____, Frame _____, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet(s).

☒ As required by 37 CFR 3.73(b)(1)(i), the documentary evidence of the chain of title from the original owner to the assignee was, or concurrently is being, submitted for recordation pursuant to 37 CFR 3.11.

[NOTE: A separate copy (*i.e.*, a true copy of the original assignment document(s)) must be submitted to Assignment Division in accordance with 37 CFR Part 3, to record the assignment in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

NOV 10 2015

Signature — Date

Dino Clarizio (Reg. No. 37572) — Patent Agent for the Owner

Printed or Typed Name — Title

Privacy Act Statement

The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (*i.e.*, GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Goodmans LLP

Barristers & Solicitors

Bay Adelaide Centre
333 Bay Street, Suite 3400
Toronto, Ontario M5H 2S7

Telephone: 416.979.2211
Facsimile: 416.979.1234
goodmans.ca

Facsimile Transmittal Sheet

November 10, 2015

OUR MATTER: 12-2581 (P1016US01)

Total number of pages being transmitted, including this page 6

TO:	COMPANY	PHONE #	FAX #
Commission of Patents	USPTO		571-273-8300

FROM: Dino P. Clarizio/ 416.597-4140 / dclarizio@goodmans.ca

MESSAGE: **Re: U.S. Patent No. 7,049,328**
U.S. Patent Application No. 10/311,814
Filing Date: April 4, 2003
Our Ref: P1016US01

Attached: Transmittal Form; Power of Attorney to Prosecute Applications Before the USPTO; Statement Under 37 CFR 3.73(b)

6512058

Doc Code: TRAN.LET
Document Description: Transmittal Letter

PTO/SB/21 (07-09)
Approved for use through 07/31/2012. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission: 5

Application Number	10/311,814 / 7,040,328
Filing Date	April 4, 2003
First Named Inventor	Spino, Michael
Art Unit	1614
Examiner Name	Henley III, Raymond J
Attorney Docket Number	P1016US01

ENCLOSURES *(Check all that apply)*

- ☐ Fee Transmittal Form
  - ☐ Fee Attached
- ☐ Amendment/Reply
  - ☐ After Final
  - ☐ Affidavits/declaration(s)
- ☐ Extension of Time Request
- ☐ Express Abandonment Request
- ☐ Information Disclosure Statement
- ☐ Certified Copy of Priority Document(s)
- ☐ Reply to Missing Parts/ Incomplete Application
  - ☐ Reply to Missing Parts under 37 CFR 1.52 or 1.53
- ☐ Drawing(s)
- ☐ Licensing-related Papers
- ☐ Petition
- ☐ Petition to Convert to a Provisional Application
- ☐ Power of Attorney, Revocation Change of Correspondence Address
- ☐ Terminal Disclaimer
- ☐ Request for Refund
- ☐ CD, Number of CD(s) _____
  - ☐ Landscape Table on CD
- ☐ After Allowance Communication to TC
- ☐ Appeal Communication to Board of Appeals and Interferences
- ☐ Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)
- ☐ Proprietary Information
- ☐ Status Letter
- ☑ Other Enclosure(s) (please identify below):
  Power of Attorney and Statement under 37 CFR 3.73(b)

Remarks

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name	Goodmans LLP		
Signature			
Printed name	Dino Clarizio		
Date		Reg. No.	37572

CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:

Signature			
Typed or printed name	Linda Dagg	Date	NOV 10 2015

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: **Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (*i.e.*, GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
10/311,814	04/04/2003	Michael Spino	PC-1834033

CONFIRMATION NO. 2281

POWER OF ATTORNEY NOTICE

23607
Heenan Blaikie LLP
Bay Adelaide Centre
333 Bay Street, Suite 2900
P.0. Box 2900
Toronto, ON M5H 2T4
CANADA

OC000000079084493

Date Mailed: 12/03/2015

NOTICE REGARDING CHANGE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 11/10/2015.

- The Power of Attorney to you in this application has been revoked by the assignee who has intervened as provided by 37 CFR 3.71. Future correspondence will be mailed to the new address of record(37 CFR 1.33).

Questions about the contents of this notice and the requirements it sets forth should be directed to the Office of Data Management, Application Assistance Unit, at **(571) 272-4000** or **(571) 272-4200** or **1-888-786-0101**.

/tnguyen/

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
10/311,814	04/04/2003	Michael Spino	P1016US01

CONFIRMATION NO. 2281

134997
Goodmans LLP
Bay Adelaide Centre
333 Bay Street, Suite 3400
Toronto, ON, M5H 2S7
CANADA

POA ACCEPTANCE LETTER

OC000000079084533

Date Mailed: 12/03/2015

NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 11/10/2015.

The Power of Attorney in this application is accepted. Correspondence in this application will be mailed to the above address as provided by 37 CFR 1.33.

Questions about the contents of this notice and the requirements it sets forth should be directed to the Office of Data Management, Application Assistance Unit, at **(571) 272-4000** or **(571) 272-4200** or **1-888-786-0101**.

/tnguyen/

Organization _____ Bldg./Room _____

UNITED STATES PATENT AND TRADEMARK OFFICE
P.O. Box 1450
Alexandria, VA. 22313-1450
If Undeliverable Return In Ten Days

Official Business
Penalty For Private Use, $300

AN EQUAL OPPORTUNITY EMPLOYER

UNITED STATES POSTAGE
PITNEY BOWES
02 1M $ 01.20⁰
0004244945 DEC03 2015
MAILED FROM ZIP CODE 22314

RECEIVED
DEC 22 2015
AD607
MAIL CENTER

MOVED / UNKNOWN / DEMENAGE / OU INCONNU
RETURN TO SENDER
RENVOI A L'EXPEDITEUR
VA 22313-1450
USA

22313004582805

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
10/311,814	04/04/2003	Michael Spino	PC-1834033

CONFIRMATION NO. 2281

POWER OF ATTORNEY NOTICE

23607
Heenan Blaikie LLP
Bay Adelaide Centre
333 Bay Street, Suite 2900
P.0. Box 2900
Toronto, ON M5H 2T4
CANADA

Date Mailed: 12/03/2015

NOTICE REGARDING CHANGE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 11/10/2015.

- The Power of Attorney to you in this application has been revoked by the assignee who has intervened as provided by 37 CFR 3.71. Future correspondence will be mailed to the new address of record(37 CFR 1.33).

Questions about the contents of this notice and the requirements it sets forth should be directed to the Office of Data Management, Application Assistance Unit, at **(571) 272-4000** or **(571) 272-4200** or **1-888-786-0101**.

/tnguyen/