

**BEFORE THE
DEPARTMENT OF HEALTH AND HUMAN SERVICES
FOOD AND DRUG ADMINISTRATION**

**In the Matter of
Applications for FDA Approval to Market a New Drug; Patent Listing Requirements and Application
of 30-Month Stays on Approval of Abbreviated New Drug Applications Certifying That a Patent
Claiming a Drug is Invalid or Will Not be Infringed**

Docket No. 02N-0417

**Comments of the
United States Federal Trade Commission**

December 23, 2002

I. INTRODUCTION

On July 30, 2002, the Federal Trade Commission released a comprehensive study that described several industry practices that delay FDA approval of generic drug products.¹ The FTC Study included legislative recommendations to address the possibility of future abuses of the generic drug approval process governed by the Hatch-Waxman Amendments. Chief among these recommendations was a proposed limitation of only one automatic 30-month stay per drug product per abbreviated new drug application (ANDA) to resolve infringement disputes over patents listed in the Orange Book prior to the filing date of the generic applicant's ANDA. On October 24, 2002, the FDA released this proposed rulemaking to eliminate the multiple 30-month stays that the FTC Study had identified as most harmful to consumers.

In this proceeding, the Food and Drug Administration (FDA) has requested comment² on those proposals to amend its regulations governing the availability of, and triggers for, the 30-month stay provision of the Hatch-Waxman Amendments as suggested by the FTC Study. Specifically, the FDA proposes: (1) to amend its existing rules to state that there will be one and only one opportunity for a 30-month stay of FDA approval of each abbreviated new drug application (ANDA); (2) to clarify the types of patents that must and must not be listed in the Orange Book; and (3) to revise the declaration statement that new drug application (NDA) applicants must submit as part of an NDA, an amendment to an NDA, or a supplement to an NDA.

The FDA's proposal limiting one 30-month stay opportunity per ANDA, although not identical to the FTC Study's recommendation, is an important reform that would eliminate a substantial portion of the potential for unwarranted delay of FDA approval of generic drugs identified by the FTC Study. Consumers should benefit significantly from earlier market entry of generic versions of brand-name drug products that are sold at substantial discounts from brand-name drug product prices.

The FDA's proposals, which clarify the types of patents that can be listed in the Orange Book to trigger the 30-month stay, provide needed guidance to the industry about patent listing issues. This comment offers additional suggestions to refine the proposed patent listing and declaration requirements. These suggestions would have heightened importance should legal challenge render the FDA's proposed limitation to one 30-month stay vulnerable while, at the same time, not disturbing the proposed listing regulations (which could potentially open the door for multiple 30-month stays based on inappropriately listed patents). In particular, we believe that the proposed requirement that brand-name companies must list polymorph patents (and certain product-by-process patents, depending upon how the provision is interpreted) increases, rather than decreases, the potential for delayed market entry by generic drug products. The comment also suggests how to address the problem of "double patenting" identified in the FTC Study, but that is not addressed in the FDA's proposals.

II. BACKGROUND: HOW GENERIC DRUGS OBTAIN FDA APPROVAL

¹ See *Generic Drug Entry Prior to Patent Expiration: An FTC Study* (Jul. 2002), available at <<http://www.ftc.gov/os/2002/07/genericdrugstudy.pdf>>.

² Department of Health and Human Services, Food and Drug Administration, *Applications for FDA Approval to Market a New Drug; Patent Listing Requirements and Application of 30-Month Stays on Approval of Abbreviated New Drug Applications Certifying That a Patent Claiming a Drug is Invalid or Will Not be Infringed*, 67 Fed. Reg. 65,448 (Oct. 24, 2002).

A brand-name drug manufacturer seeking to market a new drug product must first obtain FDA approval by filing a New Drug Application (“NDA”). At the time the NDA is filed, the NDA filer must also provide the FDA with certain categories of information regarding patents that cover the drug that is the subject of its NDA.³ Upon receipt of the patent information, the FDA is required to list it in an agency publication entitled “Approved Drug Products with Therapeutic Equivalence,” commonly known as the “Orange Book.”⁴

To obtain approval of a generic version of a brand-name drug, Hatch-Waxman requires a generic applicant to file an Abbreviated New Drug Application (“ANDA”). Under the ANDA process, an applicant must demonstrate that the active ingredient of the generic drug is “the same” as that of the relevant brand-name product,⁵ and also show that the generic drug product is “bioequivalent” to the relevant brand-name product.⁶ The ANDA must contain, among other things, a certification regarding each patent listed in the Orange Book in conjunction with the relevant NDA.⁷ One way to satisfy this requirement is to provide a “Paragraph IV certification,” asserting that the patent in question is invalid or not infringed.⁸

Filing a Paragraph IV certification potentially affects two regulatory provisions – the 30-month stay provision and the 180-day marketing exclusivity provision. An ANDA filer that makes a Paragraph IV certification must provide notice to both the patent holder and the NDA filer, including a detailed statement of the factual and legal basis for the ANDA filer’s assertion that the patent is invalid or not infringed.⁹ Once the ANDA filer has provided such notice, a patent holder wishing to take advantage of the statutory stay provision must bring an infringement suit within 45 days.¹⁰ If the patent holder does not bring suit within 45 days, the FDA may approve the ANDA as soon as other regulatory conditions are fulfilled.¹¹ If the patent holder does bring suit, however, the filing of that suit triggers an automatic 30-month stay of FDA approval of

³ 21 U.S.C. § 355(b)(1).

⁴ *Id.* at § 355(j)(7)(A).

⁵ *Id.* at § 355(j)(2)(A)(ii).

⁶ *Id.* at § 355(j)(2)(A)(iv).

⁷ *Id.* at § 355(j)(2)(A)(vii).

⁸ *Id.* at § 355(j)(2)(A)(vii)(IV).

⁹ *Id.* at § 355(j)(2)(B). Although the patent holder and the NDA filer are often the same person, this is not always the case. Hatch-Waxman requires that all patents that claim the drug described in an NDA be listed in the Orange Book. Occasionally, this requires an NDA filer to list a patent that it does not own.

¹⁰ *Id.* at § 355(j)(5)(B)(iii).

¹¹ *Id.* For example, the statute requires the ANDA applicant to establish bioequivalence. *Id.* at § 355(j)(2)(A)(iv).

the ANDA.¹² This provision is referred to as the “30-month stay provision.” During this period, unless the patent litigation is resolved in the generic applicant’s favor, the FDA cannot approve the generic product.

The second significant component of Hatch-Waxman is the “180-day period of exclusivity.” The Amendments provide that the first generic manufacturer to file an ANDA containing a Paragraph IV certification is awarded 180 days of marketing exclusivity, during which the FDA may not approve a potential competitor’s ANDA.¹³

III. FTC EXPERIENCE AND INTEREST IN THE PROCEEDING

The Commission has pursued numerous antitrust enforcement actions affecting both brand-name and generic drug manufacturers.¹⁴ In addition, the Commission released a study entitled “Generic Drug Entry Prior to Patent Expiration” (“FTC Study”) in July 2002. That study examined whether the conduct that the FTC has challenged represented isolated instances or is more typical of business practices in the pharmaceutical industry, and whether certain provisions of Hatch-Waxman are susceptible to strategies to delay or deter consumer access to generic alternatives to brand-name drug products.¹⁵ The Commission has gained expertise regarding competition in the pharmaceutical industry through other means as well. The Commission staff has conducted empirical analyses of competition in the pharmaceutical industry, including in-depth studies by the staff of the Bureau of Economics.¹⁶

A. The Commission’s Enforcement Actions in the Pharmaceutical Industry

The Commission’s first-generation litigation focused on patent settlement agreements between brand-name companies and generic applicants that the Commission alleged had delayed the entry of one

¹² *Id.* at § 355(j)(5)(B)(iii).

¹³ *Id.* at § 355(j)(5)(B)(iv).

¹⁴ *See, e.g., Biovail Corp. and Elan Corp. PLC*, Dkt. No. C-4057 (Aug. 20, 2002) (consent order); *Biovail Corp.*, Dkt. No. C-4060 (Oct. 2, 2002) (consent order); *FTC v. Mylan Laboratories, Inc. et al.*, 62 F. Supp. 2d 25 (D.D.C. 1999); *Roche Holding Ltd.*, 125 F.T.C. 919 (1998) (consent order); *Ciba-Geigy Ltd.*, 123 F.T.C. 842 (1997) (consent order). *See, also, infra* note 18.

¹⁵ *See supra* note 1.

¹⁶ Bureau of Economics Staff Report, Federal Trade Commission, *The Pharmaceutical Industry: A Discussion of Competitive and Antitrust Issues in an Environment of Change* (Mar. 1999), available at <<http://www.ftc.gov/reports/pharmaceutical/drugrep.pdf>>; David Reiffen and Michael R. Ward, *Generic Drug Industry Dynamics*, Bureau of Economics Working Paper No. 248 (Feb. 2002), available at <<http://www.ftc.gov/be/econwork.htm>>.

or more generic applicants.¹⁷ Of course, resolving patent infringement litigation through settlement can be efficient and procompetitive. Certain patent settlements between brand-name companies and generic applicants, however, drew the Commission's attention when it appeared that their terms may have reduced competition through abuses of the Hatch-Waxman regime. The Commission resolved two matters by consent order.¹⁸

A principal focus of the Commission's second-generation activities has been improper Orange Book listings.¹⁹ Unlike the matters involving settlement agreements, an improper Orange Book listing strategy involves unilateral abuse of the Hatch-Waxman process itself to restrain trade.

In January of this year, lawsuits relating to Bristol-Myers's alleged monopolization through improper

¹⁷ *Abbott Laboratories*, Dkt. No. C-3945 (May 22, 2000) (consent order), complaint available at <<http://www.ftc.gov/os/2000/05/c3945complaint.htm>>; *Geneva Pharmaceuticals, Inc.*, Dkt. No. C-3946 (May 22, 2000) (consent order), complaint available at <<http://www.ftc.gov/os/2000/05/c3946complaint.htm>>; *Hoechst Marion Roussel, Inc.*, Dkt. No. 9293 (May 8, 2001) (consent order), complaint available at <<http://www.ftc.gov/os/2000/03/hoechstandrxc.complaint.htm>>.

¹⁸ The consent order in *Abbott Laboratories* is available at <<http://www.ftc.gov/os/2000/03/abbot.do.htm>>. The consent order in *Geneva Pharmaceuticals* is available at <<http://www.ftc.gov/os/2000/03/genevad&o.htm>>. The consent order in *Hoechst/Andrx* is available at <<http://www.ftc.gov/os/2001/05/hoechstdo.pdf>>. In another matter, *Schering-Plough*, the Commission resolved all claims against one of three respondents, American Home Products ("AHP"), by issuing a final consent order. *Schering-Plough Corp.*, Dkt. No. 9297 (consent order as to AHP issued Apr. 2, 2002), available at <http://www.ftc.gov/os/2002/04/scheringplough_do.htm>.

The case against the other two respondents is on appeal before the Commission following the Administrative Law Judge's initial decision. See *Schering-Plough Corp., et al.*, Dkt. No. 9297 (Initial Decision) (July 2, 2002), available at <<http://www.ftc.gov/os/2002/07/scheringinitialdecisionp1.pdf>>.

¹⁹ The Commission first raised concerns about the potential anticompetitive impact of improper Orange Book listings in *American Bioscience, Inc. v. Bristol-Myers Squibb Co., et al.*, Dkt. No. CV-00-08577 (C.D. Cal. Sept. 7, 2000). See Federal Trade Commission Brief as *amicus curiae*, available at <<http://www.ftc.gov/os/2000/09/amicusbrief.pdf>>. In that case, the parties sought court approval of a settlement containing a specific factual finding that Bristol-Myers was required to list American Bioscience's patent of Bristol-Myers's branded drug Taxol in the Orange Book. The Commission was concerned that the court's approval of the settlement, which would have ordered Bristol-Myers to maintain the listing and include a judicial finding that the patent met the statutory listing requirements, would prejudice parties who might later challenge the listing.

listing of a patent on its brand-name drug BuSpar²⁰ presented the Commission with an opportunity to clarify whether there would be potential antitrust immunity under the *Noerr* doctrine for improper Orange Book listings. The *Noerr* doctrine²¹ provides antitrust immunity for individuals “petitioning” government. Specifically, plaintiffs alleged that, through fraudulent filings with the FDA, Bristol-Myers caused that agency to list the patent in question in the Orange Book, thereby blocking generic competition with its BuSpar product, in violation of Section 2 of the Sherman Act.²² Bristol-Myers defended its actions by, among other things, claiming that its activities were immune from antitrust scrutiny under *Noerr* doctrine. The Commission filed an *amicus* brief arguing that Orange Book filings are not “petitioning activity” immune from antitrust scrutiny.²³ On February 14, 2002, the district court issued an opinion denying Bristol-Myers’s immunity claim.²⁴

In another action, the Commission issued a consent order against Biovail Corporation,²⁵ settling charges that Biovail illegally acquired an exclusive patent license and wrongfully listed that patent in the Orange Book for the purpose of blocking generic competition to its brand-name drug Tiazac. This was the Commission’s first enforcement action to remedy the effects of an allegedly improper, anticompetitive Orange Book listing.

The Commission also has taken action against alleged anticompetitive agreements between generic manufacturers. In August, 2002, the Commission issued a consent order against two generic drug manufacturers to resolve charges that they entered into an agreement that unreasonably reduced competition in the market for a generic anti-hypertension drug.²⁶

B. The Commission's Industry-Wide Generic Drug Competition Study

²⁰ *In re Buspirone Patent Litigation/In re Buspirone Antitrust Litigation*, 185 F. Supp. 2d 363 (S.D.N.Y. 2002) (“*In re Buspirone*”). Some of the same plaintiffs previously had brought suit under the FDC Act, requesting that the court issue an order compelling Bristol-Myers to de-list the objectionable patent. Although plaintiffs prevailed at the district court level, the Federal Circuit reversed that decision, holding that the FDC Act did not provide a private right of action to compel de-listing of a patent from the Orange Book. See *Mylan Pharmaceuticals, Inc. v. Thompson*, 268 F.3d 1323, 1331-32 (Fed. Cir. 2001).

²¹ The *Noerr* doctrine was first articulated in *Eastern R.R. Presidents Conf. v. Noerr Motor Freight, Inc.*, 365 U.S. 127 (1961), and *United Mine Workers of America v. Pennington*, 381 U.S. 657 (1965).

²² 15 U.S.C. § 2.

²³ Memorandum of Law of *Amicus Curiae* Federal Trade Commission in Opposition to Defendant’s Motion to Dismiss, available at <<http://www.ftc.gov/os/2002/01/busparbrief.pdf>>.

²⁴ *In re Buspirone*, *supra* note 20.

²⁵ *Biovail Corp.*, *supra* note 14.

²⁶ *Biovail Corp. and Elan Corp. PLC*, *supra* note 14.

In light of the questions its various generic drug investigations raised, the Commission proposed an industry-wide study of generic drug competition in October, 2000. The FTC Study focused solely on the procedures used to facilitate generic drug entry *prior to* expiration of the patent(s) that protect the brand-name drug product – that is, generic entry through the procedures involving Paragraph IV certifications.

In April, 2001, the Commission issued nearly 80 special orders – pursuant to Section 6(b) of the FTC Act²⁷ – to brand-name companies and to generic drug manufacturers, seeking information about certain practices that were outlined in the Federal Register notices that preceded OMB clearance to pursue the study.²⁸ The Commission staff focused the special orders on brand-name drug products that were the subject of Paragraph IV certifications filed by generic applicants. Only those NDAs in which a generic applicant notified a brand-name company with a Paragraph IV certification after January 1, 1992, and prior to January 1, 2001, were included in the FTC Study. The selection criteria resulted in 104 drug products, as represented by NDAs filed with the FDA, within the scope of the study and included so-called “blockbuster” drugs such as Capoten, Cardizem CD, Cipro, Claritin, Lupron Depot, Neurontin, Paxil, Pepcid, Pravachol, Prilosec, Procardia XL, Prozac, Vasotec, Xanax, Zantac, Zocor, Zolof, and Zyprexa.

The Study made findings with respect to litigation frequency and outcomes that invoked the 30-month stay and/or the 180-day marketing exclusivity provisions. Based on these findings, the Commission recommended changes to the 30-month stay and 180-day marketing exclusivity provisions to eliminate the problems identified and to restore the balance that Hatch-Waxman initially struck between encouraging innovation and providing for a streamlined generic drug approval process.

IV. LIMITING BRAND-NAME PHARMACEUTICAL COMPANIES TO A SINGLE 30-MONTH STAY OPPORTUNITY PER ANDA IS AN EFFECTIVE WAY TO BRING THE ECONOMIC BENEFITS OF GENERIC DRUGS TO CONSUMERS MORE QUICKLY

The FDA proposes to provide the opportunity for a single 30-month stay of the approval date of each ANDA with a Paragraph IV certification if the generic applicant is sued for patent infringement. The FDA states that the statutory language of Hatch-Waxman supports this interpretation, although it is a different interpretation than the FDA had used previously.²⁹ This proposal is slightly different from the FTC’s legislative recommendation addressing the problems uncovered by its Study. We recognize that the FDA, however, may be unable to implement our recommendation without additional legislative authority. Nonetheless, the FDA proposal is an effective way to bring cheaper, generic copies of brand-name drug products to the market.

A. The FTC Study Supports Permitting Only One 30-Month Stay Per ANDA

The FTC Study found that certain brand-name pharmaceutical companies have attempted to “game” the 30-month stay provision by listing patents in the Orange Book after a generic applicant had filed an ANDA with the FDA. For ease of discussion, patents listed after an ANDA has been filed with the FDA will be referred to as “later-issued patents.” The FTC Study found that for drug products studied, brand-name companies have listed patents in the Orange Book after an ANDA has been filed for 8 different brand-name

²⁷ 15 U.S.C. § 46(b).

²⁸ See 65 Fed. Reg. 61334 (Oct. 17, 2000); 66 Fed. Reg. 12512 (Feb. 27, 2001).

²⁹ 67 Fed. Reg. at 65454.

drug products (Platinol, Hytrin (tablets), Paxil, Taxol, BuSpar, Neurontin (tablets and capsules), and Tiazac) with 6 of the 8 instances occurring since 1998. The delay of FDA approval caused by these later-issued patents has ranged from 4 to 44 months. The net sales for each of these products ranged from greater than \$100 million per year to greater than \$1 billion per year. Thus, the economic impact of the delay caused by the unwarranted stay of FDA approval of a generic version of the brand-name product can be substantial.

A court found the later-issued patents for Platinol, Hytrin (tablets), Taxol, and BuSpar to be either invalid or not infringed by the ANDA. Pursuant to a consent agreement with the Commission, the NDA holder dismissed its patent infringement lawsuit involving the later-issued patent listed for Tiazac. The infringement litigation involving the later-issued patents for the remaining drug products (Paxil, Neurontin (tablets and capsules)) is pending.

The FTC Study further explained that the relationship between almost all of the later-issued patents and the corresponding 8 brand-name products raised issues of whether the patents had been appropriately listed in the Orange Book. In light of these findings, the Commission recommended that Congress permit only one automatic 30-month stay per drug product per ANDA to resolve infringement disputes over patents listed in the Orange Book prior to the filing date of the generic applicant's ANDA.

B. The FTC Recommendation Would Eliminate Stays Generated From “Later-Issued” Patents When an ANDA Has Already Been Filed

The FTC proposal does not guarantee the opportunity for one 30-month stay of every ANDA with a Paragraph IV certification. Rather, FDA approval would be stayed for 30 months based only on those patents that have been listed in the Orange Book before a generic applicant files an ANDA. The FTC recommendation eliminates the potential for harm caused by 30-month stays generated by later-issued patents. For example, if a generic applicant submits an ANDA that seeks FDA approval of a generic drug product at the expiration of a certain listed patent (*i.e.*, the generic applicant files an ANDA with a Paragraph III certification) and the brand-name company lists a later-issued patent in the Orange Book for that brand-name drug product, the FDA *would not be stayed* for 30 months from approving that previously filed ANDA. By contrast, under the FDA proposal, approval would be stayed under that scenario.

If the proposed FDA rule had been in place previously, it would have eliminated the second (or subsequent) 30-month stays of the ANDAs for 7 of the 8 brand-name drug products in which the FTC found that brand-name companies had listed later-issued patents in the Orange Book.³⁰ In the other instance, the proposed rule would not have affected the start of the 30-month stay of FDA approval for most of the ANDAs for the drug product Platinol. In that case, the brand-name company listed later-issued patents in the Orange Book on the eve of the expiration of the last patent that was blocking FDA approval of the pending ANDAs.

In sum, permitting only one 30-month stay will eliminate most of the potential for “gaming” the system to delay FDA approval of generic applicants. It does not, however, completely fix the problem caused by later-issued patents listed at the eve of expiration of a patent for which generic applicants have

³⁰ For one of the 7 drug products (BuSpar), the brand-name company listed more than one later-issued patent in the Orange Book after several generic applicants had filed ANDAs that contained Paragraph III certifications relating to another patent. The FTC Study did not contain data describing when each generic applicant amended its pending ANDA to address each of the later-issued patents. It is likely, however, that most of the ANDAs for BuSpar would not have had the opportunity to be stayed for a second 30-month period had the proposed rule been in effect.

filed a Paragraph III certification. Thus, it is important to tighten the patent listing requirements as suggested by the FTC Study and discussed below to result in fewer improper listings. To do otherwise only preserves an aspect of the generic drug approval process that has a demonstrable history of abuse.

V. THE FDA SHOULD TIGHTEN ITS PATENT LISTING REQUIREMENTS TO BE CONSISTENT WITH THE RECOMMENDATIONS IN THE FTC STUDY

The FDA has proposed to clarify the types of patents that must and must not be listed in the Orange Book. Specifically, the FDA has proposed that patents claiming packaging, metabolites, and intermediates must not be listed in the Orange Book. By contrast, it proposes that product-by-process patents must be listed in the Orange Book because in such claims the “patented invention is the product (as opposed to the process used to make the product).” In addition, patents claiming a different form of the drug substance must be listed in the Orange Book.

Hatch-Waxman’s listing provisions contain a 2-prong test that must be met before brand-name companies can list patents in the Orange Book. For ease of discussion, the listing provision will be referred to as either the “listing statute” or section 505(b)(1). An NDA filer shall file with the new drug application the patent number and the expiration date of any patent:

[1] which claims the drug for which the applicant submitted the application or which claims a method of using such drug and

[2] with respect to which a claim of patent infringement could reasonably be asserted if a person not licensed by the owner engaged in the manufacture, use, or sale of the drug.”³¹

The FDA’s existing regulations interpret this 2-prong statutory requirement to mean that listable patents consist of drug substance (active ingredient) patents, drug product (formulation and composition) patents, and method of use patents. Process patents are not covered by the listing regulation.³²

We support FDA’s proposal to prohibit brand-name companies from listing patents in the Orange Book claiming packaging, metabolites, and intermediates because such patents do not meet both prongs of the test in the listing statute. We urge the FDA to refine its approach to the listing of product-by-process patents based upon our examination of the product-by-process patents that have been listed in the Orange Book. The FDA should also reconsider its reasons for requiring the listing of patents in the Orange Book that claim a different form of the drug substance than the one approved by the FDA for any given drug product base. Such a requirement is contrary to the unambiguous language of the listing statute and it could leave unchecked problems the Commission documented in the FTC Study.

Although the single 30-month stay proposal will address a significant portion of the problems the FTC Study documented, it is important to clarify which patents may be listed in the Orange Book to ensure that the listing statute is not used to delay generic drugs from coming onto the market. As noted above, the one 30-month stay proposal does not completely address the problem of brand-name companies listing later-issued patents in the Orange Book. Thus, it is critical to ensure that the 30-month stay provision does not continue to have the potential to be “gamed.” Moreover, the Commission is aware of patents in the Orange Book that provided the basis for the first 30-month stay of a generic company’s ANDAs that do not

³¹ 21 U.S.C. § 355(b)(1).

³² 21 C.F.R. § 314.53(b)

appear to satisfy Hatch-Waxman's patent listing standards.³³ Indeed, the worst outcome would be for a court to strike down FDA's one 30-month stay proposal while, at the same time, upholding FDA's regulations requiring the listing of patents in the Orange Book that do satisfy the listing statute, thus opening the door for multiple 30-month stays based on inappropriately listed patents.

A. Patents claiming packaging, metabolites, and intermediates do not meet the listing requirements and, therefore, should not be listed in the Orange Book

As FDA describes, a metabolite is the chemical compound into which a patient's body metabolizes or converts the active ingredient of a drug product.³⁴ Often the metabolite, rather than the active ingredient itself, produces the drug's therapeutic effect in the body.

Of the drug products for which the FTC Staff examined listed patents in the FTC Study, there are at least two instances where brand-name companies have listed and sued generic companies for infringement of metabolite patents.³⁵ Typically, the patentee charges that the generic applicant will induce or contribute to the infringement of the metabolite patent by selling its drug to patients who then directly infringe the patent by ingesting the drug and metabolizing it.³⁶

One district court explicitly has held that a brand-name company may not list a metabolite patent in the Orange Book, because the metabolite patent does not "claim the drug," as required by the listing

³³ See FTC Study at v, Appendix H at A-40 (discussing the patents listed for Prilosec).

³⁴ 67 Fed. Reg. at 65451.

³⁵ Two examples are Prilosec (omeprazole, Patent No. 4,636,499, claiming a metabolite compound) and BuSpar (buspirone Patent No. 6,150,365, claiming use of a metabolite compound). The generic applicants in the omeprazole litigation moved for summary judgment that they did not contribute to or induce infringement of the '499 patent. The district court granted that motion based, in part, on the argument of the generic applicants that the patent could not cover a patient's ingesting and metabolizing omeprazole because that activity was prior art to the patent. *In re Omeprazole Patent Litigation*, 2001 WL 585534 (S.D.N.Y. 2001). In a third more recent case involving a metabolite patent for the drug product Claritin (loratadine, Patent No. 4,659,716), the district court held that '716 patent was invalid because it was inherently anticipated by prior art, namely the original drug substance patent, Patent No. 4,282,233. *Schering Corp. v. Geneva Pharms. et. al.*, 2002 U.S. Dist. LEXIS 14587 (D. N.J. Aug. 8, 2002).

³⁶ *In re Omeprazole Patent Litigation*, 2001 WL 585534 (S.D.N.Y. 2001); see also, *Zenith Labs. v. Bristol-Myers Squibb*, 10 F.3d 1418, 1422 (Fed. Cir. 1994) (a patient may directly infringe a patent on a metabolite when the administered drug product is converted *in vivo* into the claimed metabolite product). Section 271 of the Patent Act gives a patentee the option of suing a direct infringer (i.e., the patient) and/or a contributory/inducing infringer (i.e., the generic drug company). 35 U.S.C. § 271(b), (c) (one who induces or contributes to direct infringement of a patent is liable as an infringer).

statute.³⁷ The court looked to the precedent, *Hoechst-Roussel Pharms., Inc. v. Lehman*,³⁸ which interpreted the term “claims” in the Patent Term Restoration portion of the Hatch-Waxman Amendments at 35 U.S.C. § 156(a) and concluded that a metabolite patent does not “claim” the approved drug product. In light of this interpretation, metabolite patents should not be listed in the Orange Book because they do not claim the drug as required by the listing statute’s 2-prongs.

Likewise, “intermediate” patents listed in the Orange Book present a category that also do not literally claim the approved drug product. An intermediate patent claims a chemical compound that is used during the production of an active ingredient, but is not present in the final, marketed form of the drug product. The claimed compound is an “intermediate” on the pathway to the approved drug. The FDA notes that under its regulations, intermediates are “in-process materials” rather than drug substances or even drug components. Thus, patents that claim intermediates do not claim the approved drug product and fail the first prong for listing.³⁹

B. Patents Reciting a Known Product, but a Novel Process Drafted in the Product-By-Process Format, Do Not Claim the Drug Product And Should Not Be Listed in the Orange Book

The FDA proposes to clarify that patents containing product-by-process claims are to be listed in the Orange Book because in such claims the “patented invention is the product (as opposed to the process used to make the product).”⁴⁰ Product-by-process patents must be listed in the Orange Book if they meet the 2-prong test of the listing statute. We suggest that the FDA refine its approach to safeguard against the listing of claims reciting a *known* product and a *novel* process that are drafted in the product-by-process format. Such claims do not claim a product and, therefore, do not meet the 2-prong test of the listing statute.

Product-by-process claims typically are used when a novel product cannot be adequately identified or described by its physical characteristics.⁴¹ In these situations, the courts have recognized that “the right to a patent on an invention is not to be denied because of the limitations of the English language, and in a proper case, a product may be defined by the process of making it.”⁴² The format of a product-

³⁷ *Mylan Pharmaceuticals, Inc. v. Thompson*, 139 F. Supp. 2d 1, 19-21 (D.D.C. 2001), *rev’d on other grounds*, 268 F.3d 1323 (Fed. Cir. 2001).

³⁸ 109 F.3d 756 (Fed. Cir. 1997).

³⁹ 67 Fed. Reg. at 65452.

⁴⁰ *Id.*

⁴¹ *In re Thorpe*, 777 F.2d 695, 697 (Fed. Cir. 1985) (“Product-by-process claims are not specifically discussed in the patent statute. The practice and governing law have developed in response to the need to enable an applicant to claim an otherwise patentable product that resists definition by other than the process by which it is made”).

⁴² *In re Bridgford*, 357 F.2d 679, 682 (C.C.P.A. 1966). The use of product-by-process claims, however, appears to be rare in the patenting of pharmaceutical products and drug substances

by-process claim ordinarily is as follows: “[substance x] made by the process of [steps (a) and (b)]” or the “the product when prepared by [steps (a) and (b)].” Nevertheless, the format of a claim is not determinative of whether the claim is a product-by-process claim, or rather some other type of claim.⁴³

Rather, as the FDA has stated, product-by-process claims are those in which the patented invention is the product,⁴⁴ as opposed to the process used to make the product. A new and patentable process cannot make a known product, which results from that process, patentable. The most essential requirement for a product-by-process claim is that the end product of the process be new and patentably distinct from prior products.⁴⁵ For ease of discussion, we refer to claims that meet this requirement as “true” product-by-process claims. When a claim is drafted in product-by-process format, but only relies on the recited *process* for patentability, it is not a “true” product-by-process claim.⁴⁶ To the extent that such a patent claim is valid, it can only extend to the process recited in the claim.⁴⁷

Because the *product* in a true product-by-process claim is a novel invention, the first prong of the

governed by Hatch-Waxman because it is possible to identify and claim such products by their physical characteristics rather than by the process of making the product.

⁴³ *Union Carbide Chemicals & Plastics Technology Co. v. Shell Oil Co.*, 2002 WL 31094845 at * 7 (Fed. Cir. 2002) (using standard patent claim construction principles to determine whether a claim is a product-by-process claim); *Mentor Corp. v. Coloplast, Inc.*, 998 F.2d 992, 997 (Fed. Cir. 1993) (interpreting claim as a method of use claim rather than product-by-process claim, where the claim language did not refer to a process of making or manufacturing).

⁴⁴ 67 Fed. Reg. at 65452. *See also* U.S. Patent and Trademark Office, “Manual of Patent Examining Procedure” § 2173.05(p) (8th ed. 2001) (A product-by-process claim “is a product claim that defines the claimed product in terms of the process by which it is made.”).

⁴⁵ *In re Brown*, 459 F.2d 531, 535 (CCPA) 1972) (“[I]t is the patentability of the product claimed and not of the recited process steps which must be established.”); *see also Atlantic Thermoplastics Co., Inc. v. Faytex Corp.*, 974 F.2d 1279, 1282 (Fed. Cir. 1992) (Newman, J., dissent from denial of reh’g en banc) (stating that in “‘true’ product-by-process claims . . . patentability and validity depend[] on the novelty and unobviousness of the *product* . . .”).

⁴⁶ *Cochrane v. Badische Anilin & Soda Fabrik*, 111 U.S. 293, 311, 4 S.Ct. 455, 465 (1884) (“It was an old article. While a new process for producing it was patentable, the product itself could not be patented, even though it was a product made artificially for the first time”); *see also In re Thorpe*, 777 F.2d at 697; *In re Luck*, 476 F.2d 650, 652 (C.C.P.A. 1973); *see also, Atlantic Thermoplastics Co., Inc.*, 974 F.2d at 1284 (Newman, J., dissent from denial of reh’g en banc) (stating that such claims “are not properly called ‘product-by-process’ claims, if that term is used with precision.”).

⁴⁷ *In re Ewert*, 77 F.2d 498, 499 (C.C.P.A. 1935) (when the product is old and only the process is new, a “claim may extend only to the process for making it.”).

listing statute requires these claims to be listed in the Orange Book (provided they also satisfy the other criteria of the listing statute). When a claim relies solely on a novel process for patentability, even if such a claim is drafted in product-by-process format, it is not a product claim, and therefore, does not satisfy the first prong. Neither the listing statute nor FDA's proposal allows the listing of patents based on claims in which the patentee only relied on the *process* as the novel invention.

The Commission in its Study identified several patents listed in the Orange Book based on claims drafted in a product-by-process format for which, according to the patent itself, the novel aspect of the invention was the *process*, not the product. For example, the FTC Study identified that certain patents listed for the drug product Paxil contained only process claims and claims drafted in the product-by-process format. The latter claims recited an admittedly known drug substance made according to a purportedly novel process.⁴⁸ Such claims are not "true" product-by-process claims of the type identified in the FDA's proposal.

The FDA has "invite[d] comment on ways to ensure that only appropriate product-by-process patents are listed, while maintaining that act's restriction against listing process patents."⁴⁹ We make two suggestions to ensure that only appropriate product-by-process patents are listed in the Orange Book. First, as an additional component of its enhanced patent declaration, the FDA may wish to require a question on product-by-process patents. If an NDA holder relies on claims drafted in the product-by-process format to support the listing of a patent, then the FDA should require the NDA holder to certify that the novelty of the claim is the product, not the solely recited process. In addition, the NDA holder should certify that the claimed product has been approved through the NDA, as required by the FDA's proposed rule and additional declaration requirement. Section VI below contains suggested language for the declaration.

Second, the FDA should revise the text of the proposed regulation to reflect the fact that only product-by-process claims in which the product is novel should be listed. Thus, the language "(in which the product is novel)" could be added immediately following the mention of product-by-process patents in the proposed regulation at § 314.53(b).

C. The Plain Language of the Listing Statute and the Underlying Purpose of Hatch-Waxman Neither Require Nor Support the Listing of Patents in the Orange Book That Claim a Different Form of a Drug Substance Than That Approved Through the NDA

The FDA proposes to amend its listing regulations so that patents claiming a different form of a drug substance than that approved through the NDA must be listed in the Orange Book.⁵⁰ The plain

⁴⁸ See FTC Study at A-42- A-44.

⁴⁹ 67 Fed. Reg. at 65452.

⁵⁰ Patents claiming a chemical compound that differ by water-of-hydration or that form a crystalline structure different from the active ingredient are referred to as "polymorphs." Under the proposed change, an NDA holder who had obtained FDA approval of the *anhydrate* form of a drug substance (having no water) would be required to list a patent, if it obtained one, claiming the *monohydrate* form of the same drug substance (having one water molecule in its crystalline structure for each molecule of the drug substance) or any patent it obtains that claims another hydrated form of the

language of the listing statute and the underlying purpose of Hatch-Waxman support retaining the FDA's existing regulations that do not allow listing patents in the Orange Book that claim a different form of a drug substance than that approved through the NDA.

As discussed above, the first prong of the listing statute requires that a patent be listed in the Orange Book that "claims the drug or a method of using the drug that is the subject of the new drug application or amendment." The FDA proposes to add to the language in its regulation implementing the first prong (which is nearly identical to the listing statute) the phrase "or that claim a drug substance that is the same as the active ingredient that is subject of the approved or pending application within the meaning of section 505(j)(2)(A)(ii) of the act."⁵¹

Section 505(j)(2)(A)(ii) requires generic applicants to show that the active ingredient of the new drug (*i.e.*, the generic version) is "the same" as that of the listed drug (*i.e.*, the previously approved brand-name drug).⁵² The FDA states that under the ANDA submission section it has allowed generic applicants to submit ANDAs for generic drugs that contain different forms of the active ingredient than that approved for the brand-name drug. Thus, in this proposal the FDA seeks to harmonize the listing statute with the ANDA submission section.

The FDA recognizes that allowing NDA holders to submit such patent information contradicts its "longstanding position that the patent must claim the approved drug or the drug product that is the subject of the application" (*i.e.*, the listing statute's requirements).⁵³ The proposal now asserts that because a generic drug must be therapeutically equivalent to the brand-name drug product and this requirement can be shown by a generic drug containing a drug substance having a different physical form than the brand-name drug product, it is consistent to require that patents for drug substances be listed in the Orange Book even if those drug substances have different physical forms than that approved through the NDA.

1. The Listing Statute Does Not Contemplate the FDA's Proposal

In our view, the listing statute prohibits the proposed policy change. The FDA's proposed interpretation is contrary to the unambiguous language of the listing statute, in particular the first prong that requires any listed patent claim the drug (either the drug substance or the drug product) that is the subject of the NDA. Congress has spoken to the precise question at issue.⁵⁴

When the FDA approves an NDA, that approval covers one form or polymorph of a drug substance. The NDA holder may not sell a version of the drug product containing an unapproved form of the drug

drug substance.

⁵¹ 67 Fed. Reg at 65452.

⁵² 21 U.S.C. § 355(j)(2)(A)(ii). For ease of discussion, this section will be referred to as the "ANDA submission section."

⁵³ 67 Fed. Reg. at 65452

⁵⁴ *Association of American Physicians and Surgeons, Inc. v. FDA*, 2002 U.S. Dist. LEXIS 19689, 709 (D.D.C. 2002) citing *Chevron U.S.A. Inc. v. Natural Resources Defense Council, Inc.* 467 U.S. 837, 842-43 (1984).

substance. The first prong of the listing statute requires the NDA holder to list any patents claiming the approved form in the Orange Book. Conversely, the plain language of the statute does not allow the listing of patents that claim an unapproved form of the drug substance.

The requirements of the ANDA submission section do not change this analysis because they do not alter the plain language of the listing statute. The FDA allows generic drug products to contain a drug substance that differ from that approved through the NDA because the FDA looks to principles of pharmaceutical equivalence in defining the “same active ingredient” requirement of the ANDA submission section.⁵⁵ Critically, the term “same” does not appear in the listing statute.

No harmonization of the two section is necessary because the scope of drug substances to be considered the “same” in the ANDA submission section is broader than the requirements governing the patents to be listed in the Orange Book. Indeed, the very structure of the Hatch-Waxman system works precisely because Congress took advantage of the fact that drugs can be pharmaceutically and therapeutically equivalent without being identical (infringing) in a patent law sense. It is this lack of patent law identity that allow generic drugs to be marketed under Hatch-Waxman before the relevant patents have expired.

The analysis required to determine whether a patent must be listed in the Orange Book is a patent law analysis (whether the patent “claims” NDA’s drug),⁵⁶ whereas the analysis required to determine whether a generic product contains the same active ingredient as that of a listed drug is a pharmaceutical analysis.⁵⁷ As explained below, the two analyses will give different results.

For example, to obtain a later polymorph patent from the PTO, the patentee typically demonstrates how the polymorph is patentably distinct from the FDA-approved drug substance. If the later polymorph were “the same” in a patent sense, then the patent claiming it would not issue in the first instance. Thus, by virtue of obtaining the later patent, the NDA holder often explicitly takes the position that the polymorph patent does not satisfy the listing statute (*i.e.*, that it does not claim the drug substance that is the subject of the NDA). Nevertheless, the FDA-approved drug substance and the later polymorph may well be pharmaceutically equivalent and, therefore, the “same” in the sense of the ANDA submission section of Hatch-Waxman.

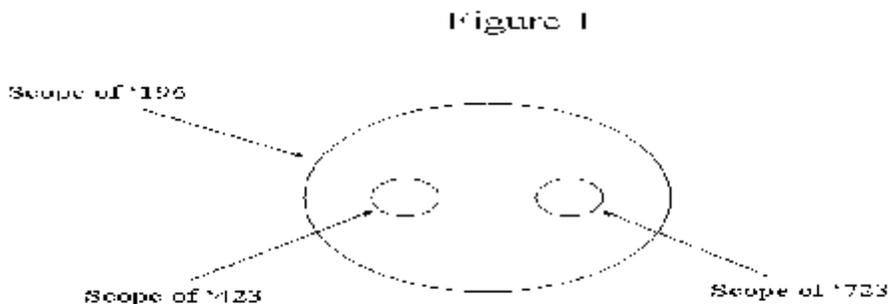
The drug substance patents listed for the drug product Paxil illustrates the distinction between a patent law analysis and a pharmaceutical analysis. The original drug substance patent (Patent No. 4,007,196) covering all forms of paroxetine hydrochloride has expired. The NDA holder obtained another drug substance patent (Patent No. 4,721,723) that claims paroxetine hydrochloride *hemihydrate*, the form of

⁵⁵ *Serono Labs, Inc., v. Shalala*, 158 F.3d 1313, 1320-21 (D.C. Cir. 1998).

⁵⁶ Indeed, in the discussion of why metabolites patents do not satisfy the requirements of the listing statute, the FDA cites with approval the notion that the term “claims” as used in the first prong of the listing statute is based on patent law concepts. *See* 67 Fed. Reg. at 65451. There is no reason why the listing statute would require a different analysis for determining whether metabolite patents and polymorph patents should be listed in the Orange Book.

⁵⁷ *But see Zenith Laboratories, Inc. v. Abbott Laboratories, Inc.*, 1997 LEXIS U.S. Dist. 23954 (D. NJ 1997).

the active ingredient approved through the NDA. The NDA holder then obtained a third drug substance patent (Patent No. 5,900,423) claiming paroxetine hydrochloride *anhydrate form A*. To prevent the '723 hemihydrate patent from being considered invalidating prior art to the '423, the patentee distinguished the anhydrate of the '423 patent from the hemihydrate form claimed in the '723 patent.⁵⁸ (The relationship of the scope of coverage of the three patents is illustrated in Figure 1.) Although the hemihydrate and anhydrate forms both fall within the broader category of all paroxetine compounds covered by the '196 patent, the '723 and '423 patents are necessarily patentably distinct from each other. They *cannot* be the "same" in a patent analysis. If they were the "same," then the '723 patent would invalidate the '423 patent. In spite of the fact that the anhydrate and hemihydrate forms are patentably distinct; however, they may react identically in a pharmaceutical sense and, therefore, be pharmaceutically equivalent.



⁵⁸ Patent law allows the patenting of a species compound (*i.e.*, the anhydrate of the '423 patent) even when a broad category, called a genus, of compounds (*i.e.*, all paroxetine compounds of the '196 patent) has been described in an earlier publication. *See In re Kaplan*, 789 F.2d 1574, 1578 (Fed. Cir. 1986).

2. Listing Patents That Do Not Claim the Approved Drug Product Undermines the Purpose of Hatch-Waxman

Several other considerations counsel against changing the current listing policy with respect to patents claiming a different form of the drug substance. First, one of the goals of the 180-day exclusivity provision in Hatch-Waxman was to encourage generic applicants to “design-around” existing patents. Many generic applicants often do design bioequivalent products having formulations that fall outside a brand-name company’s patents on its own approved formulation. Only those patents claiming the NDA holder’s approved formulation, and not every patent claiming a bioequivalent formulation, may be listed in the Orange Book. A generic applicant’s ability to formulate a bioequivalent drug product using a drug substance that differs from that of the NDA by either water-of-hydration or crystal form should be viewed as a mechanism by which the generic applicant designs around patents covering the NDA-approved product, and therefore, listed in the Orange Book. Those design-arounds are possible *only* because Congress recognized -- and codified through Hatch-Waxman -- the difference between therapeutic equivalence and sameness in a patent law sense.

Second, the FDA’s proffered justification that listing more patents in the Orange Book may conserve agency and industry resources may be theoretically possible, but is not borne out by the facts.⁵⁹ For example, when the polymorph patent issues and is listed after a generic applicant files an ANDA, the listing of the polymorph patent can delay generic competition, but it cannot conserve resources that have already been expended. This is the fact situation for the Paxil product.⁶⁰

Third, the notice function served by Orange Book listings (*i.e.*, providing generic applicants notice of what patents to design around) is not substantial because: (1) we have learned through our investigations that generic applicants actively monitor patenting activities by the brand-name companies on their own; and (2) the Orange Book does not inform generic applicants of all the patents they need to design-around (*e.g.*, process patents are not required to be listed). Thus, relying on the notice function of the Orange Book for the change in policy appears to be misplaced.

Fourth, the potential harm from listing inappropriate patents in the Orange Book can be great if such listings provide the basis for a 30-month stay. NDA holders can always litigate patent infringement claims regardless of whether the patent is listed in the Orange Book. As the FTC Study documented, however, there can be substantial harm to consumers if generic drugs are denied FDA approval because of 30-month stays based on improperly listed patents.⁶¹ The FTC Study identified listed patents claiming

⁵⁹ 67 Fed. Reg. at 65453. The FDA states that not listing all patents claiming various polymorphs of an approved drug substance may mislead potential generic applications into submitting ANDAs containing a polymorph for which a brand-name company has a patent. It could also waste FDA resources that were used to review an ANDA for a drug that is covered by an unlisted patent.

⁶⁰ See FTC Study at 51-52.

⁶¹ The listing of additional patents that could form the basis of an unwarranted 30-month stay of FDA approval could have the effect of delaying FDA approval and slowing the market entry of generic drugs. This result “would thwart Congress’s central goal, in enacting the Hatch-Waxman Amendments, to bring generic drugs onto the market as rapidly as possible.” *Mova Pharmaceutical Corp. v. Shalala*, 140 F.3d. 1060, 1068 (D.C. Cir. 1998).

different polymorphs than those approved for Hytrin, Paxil, and Neurontin that have provided the basis of 30-month stays on FDA approval of generic versions of these drug products.

Fifth, the proposed change to require the listing of patents that claim a different form of the drug substance does not remedy a documented abuse of Hatch-Waxman. This proposal is unlike the proposal to provide the opportunity for a single 30-month stay that responds, in part, to documented abuses of Hatch-Waxman that have caused significant delay of FDA approval of generic drugs. Indeed, requiring NDA holders to list patents that do not claim the approved drug product *increases*, rather than decreases, the potential for delayed market entry by generic drug products.

In light of these reasons, we continue to believe that patents that claim a different physical form of the active ingredient of an approved brand-name drug product should not be listed in the Orange Book.

D. Patents Rejected for Obviousness-Type Double Patenting in Light of the Claims of an Earlier Listed Patent, as Identified Through the Use of a Terminal Disclaimer in the Later Patent, Should Not Be Listed in the Orange Book

The FDA proposal does not address the problem of double patenting identified in the FTC Study. The FTC Study recommended that patents that claim subject matter that is obvious in light of the claims of the NDA holder's earlier listed patent, as identified through the use of a terminal disclaimer in the later patent, should not be listed in the Orange Book. The FDA may wish to safeguard against inclusion of double patents in the Orange Book as they may form the basis for a 30-month stay.

When a patent applicant obtains a second patent claiming subject matter that is either the same as,⁶² or obvious in light of, the claims of an earlier patent issued to the same applicant, it is called "double patenting." There are two types of double patenting: statutory and judicially created obviousness-type. Generally, the patent statute and the doctrine of obviousness-type double patenting render such patents invalid. The purpose of these rules is to prevent an inventor from extending the term of patent exclusivity by the subsequent patenting of variations that are not patentably distinct from the first-patented invention.⁶³

Unlike statutory double patenting which cannot be cured, obviousness-type double patenting can be cured only if the applicant files what is called a "terminal disclaimer." When the later patent claims the identical subject matter as the earlier patent, as opposed to obvious subject matter, the statutory bar on double patenting cannot be overcome with a terminal disclaimer. The later patent is invalid.⁶⁴

A terminal disclaimer acts to disclaim the term of the later patent that extends beyond the term of

⁶² This prohibition is rooted in 35 U.S.C. § 101, which provides that an inventor "may obtain a patent" for a new invention. 35 U.S.C. § 101; *see also In re Hallman*, 655 F.2d 212, 216 (C.C.P.A. 1981). The courts have interpreted the word "a" in this provision to mean that only one patent may issue for a single scientific advance. *In re Vogel*, 422 F.2d 438, 441(C.C.P.A. 1970).

⁶³ *See In re Vogel*, 422 F.2d at 441.

⁶⁴ *See* U. S. Patent and Trademark Office, "Manual of Patent Examining Procedure," Section 804.02, available at <<http://www.uspto/web/offices/pac/mpep/documents/0431.htm>>.

the original patent, so that both patents expire on the same day.⁶⁵ It is deemed an effective remedy because it restricts the patentee's exclusivity to the term of the original patent. Theoretically, the patentee receives no additional exclusionary term from the later patent.

When an NDA holder lists the later patent in the Orange Book, the patent holder does receive an additional term of exclusivity if it generates a second, later-expiring 30-month stay.⁶⁶ An NDA holder's ability to list a patent with a terminal disclaimer effectively vitiates the remedial effect of the terminal disclaimer. The NDA holder essentially obtains an extension of the exclusionary effect of its patent by listing it in the Orange Book, contrary to the intent of the patent laws. This problem is not a theoretical one. The FTC Study identified that in the case of Paxil and Fosamax, the NDA-holder had listed and sued on both an earlier-listed patent and a later-issued, double patent that contained a terminal disclaimer.⁶⁷

The FDA may wish to consider prohibiting the listing of patents having a terminal disclaimer over an already-listed patent and requiring an additional question concerning these patents in its enhanced certification procedure. Specific proposed language for the certification is set forth in Section VI. below. These measures are appropriate because only the earlier-listed patent provides the extent of protection contemplated by the Hatch-Waxman statute for the claimed subject matter.

VI. MORE RIGOROUS PATENT CERTIFICATION REQUIREMENTS CAN ASSIST IN REDUCING POTENTIAL ABUSE OF THE PATENT LISTING PROCESS

The FDA has redesigned the declaration that brand-name companies use to seek a listing of a patent in the Orange Book. This redesign is a significant improvement, but even more stringent certification requirements will help ensure that patent listings are appropriate.

We have several suggestions based on our enforcement experience and on the results of the FTC Study. First, the certification should require that the person attesting to the certification is either senior patent counsel with the NDA holder or an outside patent counsel specifically designated to act as the NDA holder's agent. Our experience indicates that certifications have been made by individuals without knowledge of the regulatory requirements or familiarity with the pertinent patent issues. Second, the FDA may wish to consider adding a knowledge requirement to the certification along the following lines: "I attest that I am familiar with the requirements of 21 C.F.R. § 314.53 and with the scope of the claims of patent number _____."

Third, the FDA should consider adding two additional declarations on patents with product-by-process claims and terminal disclaimers. To address the product-by-process issue, FDA may wish to add

⁶⁵ *See id.* at 4 (discussing why a terminal disclaimer is required to overcome judicially created double patenting rejections in applications filed on or after June 8, 1995).

⁶⁶ We note that although this problem may be limited if there is only one 30-month stay, it is important to ensure that only patents that meet the requirements of the listing statute are included in the Orange Book. *See supra* text accompanying note 33.

⁶⁷ In the Fosamax case, the NDA-holder dropped the later-filed suit shortly after filing, eliminating the potential for the successive 30-month stay to block generic approval. *See* FTC Study at A-44.

subpart F. It could read as follows:

F. For each drug substance or drug product claim that was (1) identified as listable in subparts B and C and (2) is drafted in product-by-process format, please provide the following information:

1. Is the product of the recited process novel? *[If the answer to question F.1 is "no," stop. The patent cannot be listed. If yes, please identify the claim(s) by number.]*

To address the terminal disclaimer issue, the FDA may wish to add the following questions to subpart A of the proposed declaration:

5. Does this patent contain a terminal disclaimer over a patent that has been listed in the Orange Book? *[If the answer to question A.5 is yes, stop here. The patent may not be listed in the Orange Book. If the answer is no, proceed to subpart B.]*

Finally, in its proposed declaration, the FDA included a new emphasis on the specific claims of the listed patent, rather than solely on the patent as a whole. This is a desirable step that should add clarity to the patent listing process. Nevertheless, it is unclear whether the FDA's regulation now treats individual claims of the patent to be listable, or whether the patent itself is listable given the presence of a single listable claim. For example, a single patent may include both claims to a process or an intermediate, which are not listable, as well as listable claims to an a product formulation. In that case, an NDA holder may argue that litigation solely on a process claim might generate a 30-month stay. In light of the proposed changes to the patent certification requiring identification of specific claims supporting listing, we suggest the newly requested information be recorded in the Orange Book. Accurate patent listings, along with identification of the claims that support the listings, will ensure that the FDA invokes the 30-month stay only when a suit is brought over a claim that supports a listing in the Orange Book.

VII. CONCLUSION

The FDA has proposed to clear away unnecessary roadblocks to the approval of generic drug products. The FDA's important action addressing the competitive problems existing in the approval process for generic drugs, if promulgated and upheld, will an effective way to bring the economic benefits of generic drugs to consumers more quickly. The Commission urges the FDA, however, to make the proposed reforms even more effective by tightening its patent listing requirements. This additional step will prevent unnecessary delays in generic drug approvals by ensuring that patents are not listed in the Orange Book that do not meet the listing statute's requirements.

By direction of the Commission.

Donald S. Clark
Secretary