

Amgen Inc. v. Chugai Pharmaceutical Co.,
(US District Court, District of Massachusetts - 706 F. Supp. 94 1989)

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Summary

The Court ruled that the export/import of samples of a biological product protected by patent for the conduct of stability studies "solely for uses reasonably related to the development and submission of information under" reporting requirements of federal drug laws, is permitted under the regulatory review exemption.

The facts

Erythropoietin (EPO) is a hormone, which is produced naturally in healthy individuals' kidney to regulate the level of red blood cells. Prior to 1980, EPO was obtained by purifying the urine of patients suffering from anemia. In October 1987, Amgen secured a patent, which it filed in December 1983 that claimed purified and isolated EPO genetic materials and genetically engineered host cells useful in the recombinant production of EPO (rEPO). GI is the owner of another patent, filed in 1984 and issued on June 30, 1987, on methods for the purification of EPO and EPO compositions, with certain weight and biological activity. Chugai pharmaceutical Co., Ltd. ("Chugai"), a company located in Tokyo, Japan, is the exclusive licensee of the GI patent. In 1988, Chugai shipped samples of DNA to GI and another sub-contractor, Besselaar, for DNA stability study.

On October 27, 1987, Amgen filed a suit alleging infringement of its patent by GI. It also alleged that Chugai, as a result of a collaborative relationship with GI, has induced and/or contributed to the direct infringement of its patent by GI. Amgen also argued that GI's patent is invalid. In response, GI and Chugai asserted that Amgen's patent is invalid for anticipation, obviousness, and failure to describe the best mode to practice the invention and to enable the invention. In addition, Chugai contended that it shipped DNA sequences from its host cells in Japan to GI for the sole purpose of conducting DNA stability studies required by the U.S. Food and Drug Authority (FDA).

The legal issues

The case involved the legal issues of infringement and validity of various claims contained in the patents of both Amgen and GI, as well as the defense of regulatory use exemption. Except for some of the respective claims, the District Court ruled that both Amgen's and GI's patents are valid. It also found both sides infringing on the other's patents, but neither of them engaged in wilful infringements, nor in inequitable conduct.

With respect to the regulatory review exception, the Court stated that FDA requires DNA stability data in connection with its regulatory approval process. Chugai has supplied GI

and another subcontractor, Besselaar, with the EPO DNA samples. Besselaar filed a product license application on behalf of Chugai in September 1988, with the U.S. FDA, which contained clinical information relevant to the safety and efficacy of the new drug EPO in its intended use. Chugai had requested that GI clone the EPO gene and perform DNA sequence analysis to determine the DNA sequence of the EPO coding region. The DNA samples as received were incapable of producing EPO. GI did not use any biologically functional vectors as defined in Amgen's patent, but only used cloning vectors, which would not permit EPO to be expressed. GI made no use of the information generated as a result of the stability studies other than send it to Chugai.

Based on this evidence, the court concluded that GI and Chugai had demonstrated that Chugai's May, 1988 shipment of two DNA samples to GI for the conduct of stability studies was "solely for uses reasonably related to the development and submission of information under" reporting requirements of federal drug laws, which is permitted under 35 U.S.C § 271(e)(1).

Amgen relied on one of the testimonies during the Court hearing that information from the EPO stability studies was "useful" as it pertained to the Chugai commercial production process. However, the expert also testified that he had no knowledge as to whether Chugai made any use of the DNA stability study other than for submission to the FDA.

To support its claim of infringement, Amgen also pointed to Chugai's submission that contains an admission that GI transferred to Chugai, but did not sell, a small quantity of host cells transfected with a cDNA sequence encoding EPO after October 27, 1987. Chugai in Japan used these cells for experimental rather than commercial purposes. However, the Court concluded that Amgen had not met its burden of showing that the host cells were manufactured or used in the United States after the issuance of its patent or that the host cells were sold. It also stated that Amgen has provided evidence only of one single transfer of host cells and has not demonstrated that this host cell transfer is anything other than a *de minimus* occurrence, which does not constitute infringement.

Points of Significance

1. The decision was focused on establishing the facts: whether the evidence supports Chugai's use of the patent solely for purpose related to the submission of data for the FDA, or it had commercial purpose. The Court, however, stated that a *de minimus* commercial use of a patented substance does not constitute an infringement. The significance of the case rests in its application of the regulatory review exemption to patents related to human biologics that requires regulatory approval and their import/export for the same purpose.
2. On January 4, 1988, Amgen also challenged Chugai's reproduction of rEPOs (reproduction of EPO's in a host cell) at the International Trade Commission (ITC) of the United States alleging that Chugai used a process covered by Amgen's patent. The ITC, as confirmed on appeal by the Court of Appeals for the Federal Circuit, concluded that no infringement occurred, since Amgen's patent did not include a claim covering the use of the process for the reproduction of rEPOs. Patent covering a

host cell is not the same as patent for the process for the production of rEPOs using the patented host cell. See, *In the Matter of Certain Recombinant Erythropoietin*, U.S. Int'l Trade Comm'n (Investigation No. 337-TA-281) (1989) and *Amgen Inc. v. U.S. Intern. Trade Com'n.*, 902 F.2d 1532, 1535, 14 U.S.P.Q.2d 1734, 1737 (Fed. Cir. 1990).

3. The US Supreme Court subsequently expanded the scope of the regulatory review exemption under US law, allowing its application to medical devices (*Eli Lilly & Co. v. Medtronic, Inc.*) and to cover pre-clinical trials (*Merck KGaA v. Integra Lifesciences, Ltd.*).¹

Keywords: regulatory review exemption, hormone.

Link: <https://law.justia.com/cases/federal/district-courts/FSupp/706/94/1589357/>

¹ See the summaries of both decisions in this database.