

Case No. 721. BADISCHE ANILIN & SODA FABRIK v. HAMILTON MANUF'G CO.

[3 Ban. & A. 235; 13 O. G. 273; Merw. Pat. Inv. 170.]¹

Circuit Court, D. Massachusetts.

Feb. 4, 1878.

PATENTS FOB INVENTIONS—FOREIGN PATENT—EXPIRATION—PROCESS AND PRODUCT.

1. The provision of the statute—Act 1870, § 25, [16 Stat. 198]—providing that, in case of a foreign patent, the United States patent shall expire at the same time with the foreign patent, is not retroactive in its operation, and does not apply to American patents granted before the law took effect, or to the reissues of such patents granted after the law took effect.

[Cited in *Goff v. Stafford*, Case No. 5,504. Distinguished in *De Florez v. Reynolds*, 8 Fed. 444.]

2. The right to reissue a patent in two divisions, one for the new process, and one for the new product, illustrated.

[Cited in *Badische Anilin & Soda Fabrik v. Cochrane*, Case No. 719.]

[See *Tucker v. Burditt*, Case No. 14,216; *Bennett v. Fowler*, 8 Wall. (75 U. S. 445.)

3. When a thing is produced new, in and of itself, it is patentable as a new manufacture.
4. A patent for a new manufacture is infringed by the manufacture of the new product by any process whatever.
5. Before the invention covered by complainants' patent "alizarine" had been used as a generic term, applied to many different dye stuffs, and yellow and green alizarines were in the market. Chemically pure alizarine existed only in the books, and a body approximating to it only in the laboratory of the chemist. The claim of complainants' reissued patent (division B) was for "artificial alizarine produced from anthracene or its derivatives by either of the methods herein described, or by any other method which will produce a like result." *Held*, under the circumstances of the case, that the reissue was not void for claiming alizarine, which was before well known, but that the invention patented was the new composition, which contained, combined with alizarine, other bodies of themselves effective agents before unknown, and which existed for the first time when produced by the patentees.

[6. Letters patent No. 95,465, issued October 5, 1869, to Graebe and Liebermann, are valid.]

[Cited in *Badische Anilin & Soda Fabrik v. Higgin*, Case No. 722, and *Cochrane v. Badische Anilin & Soda Fabrik*, 111 U. S. 297, 4 Sup. Ct. 457.]

[In equity. Bill by the Badische Anilin & Soda Fabrik against the Hamilton Manufacturing Company, for infringement of letters patent. Decree for complainant.]

George Gifford and J. Van Santvoord, for complainants.

Edward N. Dickerson, for defendants.

SHEPLEY, Circuit Judge. An objection is raised to the validity of the reissued letters patent, under which complainants claim that the original patent was taken out in England by Graebe and Liebermann, on the 16th of June, 1869, and was suffered to expire, by reason of the omission to pay the annual fees upon it, on the 18th of December, 1871, after the reissue of the American patent for the same invention, dated April 4th, 1871. It is contended that the patent in controversy was issued under the act of July 8th, 1870, [16

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Stat. 198,] and that as the 25th section of that act provided that an American patent “shall expire at the same time with the foreign patent” which has been obtained previous to the American patent, the reissue of the American patent expired on the 18th of December, 1871, when the English patent expired.

The act of March 3d, 1839, [5 Stat. 353, c. 88,] provided that, in all cases where a patent shall be granted after the same invention shall have been patented in a foreign country, “such patent shall be limited to the term of fourteen years from the date or publication of such foreign letters patent.” The act of March 2d, 1861, [12 Stat. 246,] provides “that all patents hereafter granted shall remain in force for the term of seventeen years from the date of issue,” and repeals all acts and parts of acts before passed, inconsistent with the provisions of the act of 1861. The act of 1870, § 25, provides that in case of a

prior foreign patent, the United States patent "shall expire at the same time with the foreign patent, or, if there be more than one, at the same time with the one having the shortest term."

The law of July 8th, 1870, (Rev. St § 4887.) was not retroactive, and did not operate to put an end to American patents granted before the law took effect. The original patent in this case was dated October 5th, 1869, before the passage of the act of 1870. Without a breach of good faith to the patentee, who had complied with the provisions of previous acts by disclosing his invention and paying the required fees, congress could not take away any portion of the term of the patent, or any right to a reissue which existed under the laws in force when the patent was granted, and which formed a part of the contract between the parties. Nor is any such intention to be gathered from the words of the statute. The act of 1870 has not, in the practice of the patent office, been acted upon as retroactive. *Apperly v. Clissold*, Com. Dec. 1870, p. 164. This long-continued usage and practice of one of the departments of the government is entitled to be considered by courts with great respect. The act of 1870, while repealing prior acts, contains a proviso saving all rights existing and all remedies which have arisen under any of said laws, and § 5,597 of the Revised Statutes contains a similar provision. The patent of Graebe and Liebermann, assigned to the complainants, did not, therefore, expire when the English patent became void by the omission to pay the annual fees.

The subject of the patent is a new and useful composition of matter, being an improvement in dyes or coloring matter produced from anthracene, and styled in the reissue as "artificial alizarine." Before the invention of Graebe and Liebermann the word "alizarine," a word coined from the Arabic and modern Greek names for madder, was commercially applied to a class embracing different varieties of dye stuffs obtained from the madder plant. These dye-stuffs owed their value not only to a crystallized compound, which can be obtained from the madder and some other plants, known as "alizarine," but also to other materials existing naturally in the madder, or produced by the action of fermentation, heat, and the like, and by the aid of chemicals. The term "alizarine" was also applied by chemists to a theoretically pure crystallized extract from madder, whose formula was $C_{14}H_8O_4$. These madder extracts were among the most valuable dye-stuffs known to the world, and to supply the great and constantly increased demand for them large tracts of land were devoted to the raising of madder.

In 1868, Graebe and Liebermann, by a new process invented by them, produced their new composition of matter, now, for want of a name more accurately descriptive, called "artificial alizarine," a product unknown to both science and the arts at the date of their invention. Coal-tar (a substance containing a large number of the compounds caused by the various reactions which take place when coal is subjected in close vessels to intense heat), when submitted to a second distillation, yields at a very high temperature, as one

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of its products, anthracene, which, when purified, is a white, waxy substance. From this body named "anthracene," Graebe and Liebermann, by the series of chemical treatments described in the specifications, built up a beautiful and complex product, an artificial dye-stuff, now known as "artificial alizarine." This was not a chemically pure alizarine. Their process stopped far short of the elimination, from the product, of the bodies other than chemically pure alizarine. In fact, the presence of some of the other bodies appears to much enhance the value of the dye-stuff produced by their process. This product was one entirely new. The process by which they produced it was entirely new. Anthrapurpurine, isopurpurine, and other bodies, combined with alizarine in their product, are not known to have existed before they were produced by Graebe and Liebermann.

This composition of matter, which to a great degree has taken the place of madder preparations in the arts of dyeing and calico printing, was new as to its origin. It was a purely artificial production, built up, as well as described by Professors Morton, Hedrick, and Ordway, by a process of chemical synthesis, from materials none of which contained it, or anything approaching to it, in character or properties. Its composition was new. It contained, combined with alizarine, other bodies of themselves effective dyeing agents before unknown, and existing for the first time when produced by Graebe and Liebermann. It was new not only in some of its new chemical properties, but in its capacity to produce, in dyeing and calico-printing, tints which cannot be obtained with the preparations of madder or any other dye-stuffs previously known.

Objection is made to the validity of the reissued patent upon which this bill is brought. Graebe and Liebermann, on the 5th of October, 1869, obtained letters patent of the United States, No. 95,465, in which, after describing their process in the words contained in the reissue, they made the following claim: "The within-described process for the production of alizarine, by first preparing bibromanthrakinson or bicloranthrakinson, and then converting these substances into alizarine, substantially as above set forth." This patent was subsequently reissued in two divisions, one for the process and one for the product. In division B, upon which this suit is brought, they claim: "Artificial alizarine produced from anthracene or its derivatives by either of the methods herein described, or by any other method which will produce a like result."

The right to reissue in two divisions, one for the new process and one for the new product, is fully sustained by the opinion of Mr. Justice Clifford, in *Goodyear v. Providence Rubber Co.*, [Case No. 5,583:] “No doubt can be entertained that a new product or manufacture, and a new process or method of producing the new article, are the proper subjects of separate and distinct claims in an original patent, and, if so, then it is equally clear that the patentee, under that provision, upon a return of the patent for correction and reissue, and upon complying with the conditions therein specified, may have several patents for the distinct and separate parts of his invention.”

When a thing is produced new, in and of itself, it is patentable as a new manufacture. If it be capable of being produced by various different processes, yet, when the product is new, independent of the process, the patent is infringed by the unlicensed manufacture of the new product by any mode of manufacture, the process of manufacture being wholly unimportant. *Merrill v. Yeomans*, [Case No. 9,472;] *Goodyear v. Central R.*, [Id. 5,563.] But defendants further contend that alizarine was a well-known substance long before the patent, and it could not be made the subject of any letters patent, and that the reissue is void as claiming alizarine broadly, and as claiming more than the invention described in the original. An examination of the original and the reissue will show that the same process and the same product is described in both. Before the invention, the name “alizarine” had been used as a generic term, applied to many different dye-stuffs, and yellow and green alizarines were in the market. Chemically pure alizarine existed only in the books, and a body approximating to it only in the laboratory of the chemist. As the new manufacture was intended to take the place of the dye-stuffs extracted from madder, and as, in common with those dye-stuffs, it owed a large proportion of its value as a dye to the presence of alizarine, it was not erroneous, although not accurately descriptive, to apply to this product of a distillation of coal treated with chemicals a name which had been applied to preparations from madder, without any more accuracy in one case than the other. Whatever Graebe and Liebermann called their product in the original or the reissue, it was a new product, and they showed what it was and how it could be produced. Pure alizarine, if it ever existed, except in chemical notation or laboratory experiment, could not have been made the subject of a patent. Nor have Graebe and Liebermann undertaken to patent alizarine, if by alizarine is meant what was known before their inventions to chemists as the body existing in dye-stuffs prepared from the madder. What they have patented is the new composition of matter and the new manufacture, having the described properties, produced from anthracene by any process which will produce their new product.

Before the discovery of the aniline dyes, Dahme and Unverdorven, by treating indigo, obtained a new substance, which was called “aniline,” from anil, the word used in some countries for indigo, as al-nil is the Arabic for the indigo plant. When a similar substance

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was obtained from coal-tar, it was also called "aniline." But calling the dye thus obtained from coal-tar by the same name as the dye extracted from the indigo plant did not make the aniline dyes and the indigo dyes identical, although they are in some respects identical in composition. So, when Graebe and Liebermann's new dye was discovered, they at first called it "alizarine," from the Arabic, Alzari, name of the madder plant. But calling their extract from anthracene by the same name which had been applied to the extracts from madder, did not necessarily imply that the two things were identical, as most surely they are not in fact, and are shown not to be by the specifications.

Reissue division B must, therefore, be considered as a valid patent for a new manufacture and composition of matter, and as the evidence clearly proves an unlicensed use by the defendants, there must be a decree for injunction and account, according to the prayer of the bill.

{For other suits involving the same patent, see *Badische Anilin & Soda Fabrik v. Cochrane*, Case No. 719; *Cochrane v. Badische Anilin & Soda Fabrik*, 111 U. S. 293, 4 Sup. Ct. 457; *Badische Anilin & Soda Fabrik v. Cummins*, Case No. 720; *Same v. Higgins*, Id. 722.)

¹ [Reported by Hubert A. Banning, Esq., and Henry Arden, Esq., and here reprinted by permission. Merw. Pat. Inv. 170, contains partial report only.]