

# Boston University Journal of Science & Technology Law

## Legal Update

### In Re Chu<sup>†\*</sup>

#### 1. *Introduction*

On September 14th, 1995, the Court of Appeals for the Federal Circuit (“Federal Circuit”) ruled that complete identity of inventorship between an earlier patent application and a subsequent continuation-in-part patent application was not required in order for the applicants to benefit from the earlier patent’s filing date, provided there was an overlap of inventive entities between the earlier and subsequent patent applications. [1]

#### 2. *Background of the Invention*

The applicants’ invention related to an apparatus used to control emissions from fossil fuel boilers such as sulfur oxides and oxides of nitrogen, and particulates such as fly ash. The only independent claim at issue recited

[a]n apparatus . . . comprising . . . a high-temperature pulse jet fabric filter house connected along the flue gas duct between the boiler and the stack constructed so as to remove particulate from the flue gas passing along the flue gas duct, said fabric filter house having a plurality of fabric filter bags contained therein with each of said fabric filter bags having a bag retainer situated therein; a selective catalytic reduction catalyst positioned inside the bag retainer of each of said fabric filter bags in said filter house . . . . [2]

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\* *In Re Chu*, 36 U.S.P.Q.2d 1089 (BNA) (Fed. Cir. 1995).

The independent claim further claimed that the apparatus comprised “means for injecting an ammoniacal compound into the flue gas duct upstream of [the] filter house whereby the sorbent reacts with the sulfur oxides, the particulates are removed in said fabric filter house, thus protecting the nitrogen oxides reduction catalyst from fly ash erosion and sulfur oxide poisoning.” [3]

### 3. *Prosecution History*

#### A. Patent Examiner’s Analysis

The examiner rejected the independent as well as several dependent claims as being obvious<sup>1</sup> over a patent (the Doyle patent) issued earlier to one of the current applicants, and further, in light of another issued patent (the Szymanski patent). The examiner reasoned that although the Doyle patent failed to disclose a “baghouse filter having a catalyst located within the filter,” the Szymanski patent taught a similar baghouse filter as in the applicant’s independent claim 1. Specifically, the examiner found that a person of ordinary skill in the art would have readily ascertained, given Doyle and Szymanski’s inventions, that by incorporating the baghouse filter disclosed in the Szymanski patent and incorporating it into the apparatus in the Doyle patent, they could produce the current applicants’ invention. [4]

#### B. Analysis of the Board of Patent Appeals and Interferences

In response to the applicants’ appeal of the examiner’s rejection of their patent application, the Board affirmed the availability of the Doyle patent as a prior art reference for the applicants. It reasoned that “because the Doyle patent and the Chu application have different, albeit overlapping, inventive entities,” the Doyle patent was necessarily the work of *another* as defined in the United States Patent Code,<sup>2</sup> and therefore available as a prior art reference against the Chu application. The Board rejected as irrelevant the fact that Chu had claimed the benefit of Doyle’s

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<sup>1</sup> Obviousness is one of three primary requirements for patentability under United States Patent law. Section 103 of Title 35 of the United States Patent Code, which governs the obviousness standard, states in part that “[a] patent may not be obtained . . . if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the subject matter was made to a person having ordinary skill in the art to which said subject matter pertains.” 35 U.S.C. § 103 (1988).

<sup>2</sup> 35 U.S.C. §102(e), which states in part that “[a] person shall be entitled to a patent unless . . . the invention was described in a patent granted on an application for patent by *another* filed in the United States before the invention thereof by the applicant for patent.”

earlier filing date<sup>3</sup> by claiming continuation-in-part (“CIP”) status under the Patent Code.<sup>4</sup> The Board reasoned that “an attempt to claim CIP status between applications which never shared the same inventive entity is unavailing as a means to overcome” an obviousness rejection under section 103 of the Patent Code. [5]

#### 4. *Analysis of the Court of Appeals for the Federal Circuit*

Circuit Judge Rich reviewed both the availability of the Doyle patent as prior art and the substantive obviousness of the claims at issue in light of the available prior art references. Judge Rich began his analysis of the Patent Code by highlighting Congress’ s substitution of the phrase “by the same inventor” in 35 U.S.C. s.120 with the phrase “which is filed by an inventor or inventors named in the previously filed application” in the Patent Law Amendments Act of 1984. Judge Rich stated that with this change in statutory language, Congress intended to allow continuation, divisional, and continuation-in-part<sup>5</sup> applications to be filed and afforded the filing date of the parent application even absent complete identity of inventorship between the parent and subsequent applications. Stating that this would allow greater latitude in filing continuation applications, Judge Rich clarified that the amended section 120 of the Patent Code permits an application to benefit of from the filing date of a previously-filed application even when not all inventors named in the joint application were the same as named in the earlier application. Thus Judge Rich reversed the Board’s conclusion that the Chu application—which

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<sup>3</sup> The earlier-filed patent application is referred to as the parent application. By “parent” application, it is generally understood that the reference is to the earlier-filed application that the subsequent application relies upon for the earlier filing date. In this case, the parent application would be the Doyle patent.

<sup>4</sup> 35 U.S.C. §.120, titled *Benefit of earlier filing date in the United States*, states in part that “[a]n application for patent for an invention disclosed in the first paragraph of section 112 of [Title 35] in an application previously filed in the United States, . . . which is filed by an inventor or inventors named in the previously filed application shall have the same effect, as to such invention, as though filed on the date of the prior application.” This section of the Patent Code permits an inventive entity to file for a patent application, and subsequently file a related patent application for inventions whose substantive nature is disclosed in the prior-filed application, where the subsequent patent application can have the initially-filed patent application’s filing date as the filing date of the subsequently filed application.

<sup>5</sup> A continuation patent application is a “spin-off” of an original patent application that does not substantively add to what was already disclosed and claimed in the original application. In this case, the continuation application is afforded the filing date of the earlier-filed, or parent, application. A continuation-in-part application is similar to a continuation application except that it claims substantively new matter. The new matter is not afforded the filing date of the earlier-filed parent application. Finally, a divisional application results when an original application claims more than one invention initially such that the applicant is required to divide the application into separate patent applications. In this case, both parts of the divided patent application are given the benefit of the original, earlier filing date.

incorporated one, but not all, of the inventors of the Doyle patent—was prevented from claiming priority under section 120 of the United States Patent Code. [6]

In the second part of his analysis, Judge Rich reiterated the elementary principle of patent law: A patent application is entitled to the benefit of the filing date of an earlier-filed application only if the disclosure of the earlier-filed application provides support for the claims of the later application, as required by section 112<sup>6</sup> of the United States Patent Code. Section 120, in conjunction with section 112 of the Patent Code, requires that in order for the subsequently-filed application to take advantage of its parent application's earlier filing date, the parent application must disclose the subject matter claimed in the subsequent application. Therefore, in order for the Chu application to successfully claim the earlier filing date of its parent application, the Doyle patent had to disclose the subject matter of Chu's application. This meant that the Doyle patent had to make some reference to the Chu application's, namely that an SCR catalyst be placed inside the bag filter. This aspect of the patent, however, was expressly disclaimed by the applicants during the prosecution of their application: The Chu application stated that "the invention now claimed [] was not described in the [Doyle] patent." Accordingly, Judge Rich found that Chu's independent claim 1, the subject matter of the patent application at issue, was not supported by the Doyle patent's disclosure. Therefore, Judge Rich denied Chu the benefit of its parent application's earlier filing date. [7]

Although the applicants in Chu met the first prong of the test, requiring that at least some of the inventive entity overlap with the parent application upon which priority is claimed, the applicants failed to meet the second prong of the test by not showing that a specific aspect of their application was sufficiently disclosed in the parent application. Therefore, the Federal Circuit determined that the applicants could not obtain the benefit of the Doyle patent's earlier filing date. The court further found that the Doyle patent was available as a prior art reference against the Chu application. [8]

## 5. *Comments*

In *In re Chu*, Judge Rich announced a clear standard by which it can easily be determined whether a subsequently-filed application can take advantage of its parent application's earlier filing date. Specifically, in order for a subsequently-filed patent application to claim the filing date of its parent application, two requirements must be met. First, the inventive entity in the subsequent application must overlap at least in part with the inventive entity disclosed in the parent application. Using Judge Rich's example, if the previously-filed application named inventors A and B

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<sup>6</sup> 35 U.S.C. § 112, titled "Specification," requires that the patent application be sufficiently detailed to enable a person skilled in the art to make and use the invention, and further, to set forth the best mode contemplated by the inventor of carrying out his invention.

as the inventors, a later application by *either* A or B could be filed during the pendency of the previously-filed application and claim the benefit of the previously-filed application. Second, the earlier-filed application must disclose the subject matter claimed in the subsequently-filed application. Only when these two requirements are met can a subsequently-filed application claim the benefit of its parent application's earlier filing date. [9]

This ruling affords attorneys and patent agents who prosecute patents a simple and clear guideline. Given the likelihood that many patents prosecuted in the United States will increasingly overlap in inventive entities, and further, given that many research and development firms and companies are likely to file an increasing number of patent applications with joint inventorships, Judge Rich's guideline, as spelled out in *In re Chu*, provides a standard by which patent attorneys and agents can easily tailor their actions. [10]

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