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How Electric Power Group Case Is Affecting Software Patents

By **Michael Kiklis** (August 19, 2019)

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Many commentators predicted the end of software patents after the U.S. Supreme Court's Alice Corp. v. CLS Bank International decision. Software patent practitioners therefore applauded when the U.S. Court of Appeals for the Federal Circuit stated in 2016's Enfish LLC v. Microsoft Corp. decision that "claims directed to software, as opposed to hardware, are [not] inherently abstract."[1] But soon thereafter, our optimism waned when the Federal Circuit in Electric Power Group LLC v. Alstom SA found that data gathering, analysis and display is an abstract idea, thus rendering many software inventions abstract.[2]

In fact, the Federal Circuit is recently applying Electric Power Group more frequently and has even expanded its use to find that "entering, transmitting, locating, compressing, storing, and displaying data"[3] and "capturing and transmitting data from one device to another" are abstract ideas.[4] Many software inventions — such as artificial intelligence systems — gather data, analyze that data and perform some operation that usually includes displaying or transmitting the result. Electric Power Group and its progeny therefore pose a serious risk to software inventions, including even the most innovative ones. Knowing how to avoid Section 101 invalidity risk from these cases is therefore critical. This article provides strategies for doing so.

The Problem With Being Abstract

Alice holds that if a claim is directed to an abstract idea and it does not recite an inventive concept, the claim is ineligible under 35 U.S.C. Section 101.[5] A finding that a claim recites an abstract idea therefore gets you halfway to invalidity. Alice also teaches that implementing the abstract idea on a generic computer is not an inventive concept.[6] In many software inventions, the novelty is not in the hardware on which the software runs, but in the software itself. As a result, the specifications of those patents state that the invention could run on any suitable computer. Although this may reflect the true scope of the invention, these statements are deadly in view of Alice and Electric Power Group — a killer combination.

Electric Power Group and Its Progeny

In Electric Power Group, the Federal Circuit held that "collecting information, analyzing it, and displaying certain results of the collection and analysis" is an abstract idea by relying on case law finding that each individual step itself was an abstract idea.[7] For example, the court stated "we have treated collecting information … as within the realm of abstract ideas," "we have treated analyzing information … as essentially mental processes within the abstract-idea category" and "we have recognized that merely presenting the results of abstract processes of collecting and analyzing information, without more (such as identifying a particular tool for presentation), is abstract."[8]

Then, the Federal Circuit held "the claims are clearly focused on the combination of those abstract-idea processes" and "[t]hey are therefore directed to an abstract idea."[9] Importantly, the court distinguished the claims at issue from Enfish because those claims related to "computer-functionality improvements" and not using "existing computers as tools in aid of processes focused on 'abstract ideas.'"[10]

Electric Power Group has now been used almost 20 times by the Federal Circuit to find software inventions abstract, some of which do not arguably seem very abstract. For example, in TDE Petroleum Data Solutions Inc. v. AKM Enterprise Inc., the court found a claimed invention that monitors and detects the state of an oil well was directed to an abstract idea.[11] In FairWarning IP v. Iatric Systems Inc., the Federal Circuit found a claimed invention abstract that "detect[s] fraud and/or misuse in a computer environment based on analyzing data such as in log files … including user identifier data."[12]

Also, in West View Research LLC v. Audi AG, the Federal Circuit found a claim abstract that recited "a 'computerized apparatus capable of interactive information exchange with a human user' via 'a microphone,' 'one or more processors,' a 'touch-screen input and display device,' a 'speech synthesis apparatus' with 'at least one speaker,' an 'input apparatus,' and a 'computer program' that receives the user's input and generates an audible or visual result" that also included a limitation "that allows the results to be wirelessly transmitted to a user's 'portable personal electronic device.'"[13]

And, in Two-Way Media Ltd. v. Comcast Cable Communications LLC, the Federal Circuit found an invention abstract that streamed audio/visual data over a communications system because it was directed to "functional results" and "did not sufficiently describe how to achieve these results" by claiming "(1) sending information, (2) directing the sent information, (3) monitoring the receipt of the sent information, and (4) accumulating records about receipt of the sent information."[14]

More recently, the Federal Circuit appears to be broadening its application of Electric Power Group. For example, in Voit Technologies LLC v. Del-Ton Inc., the claims recited:

> [T]he process of, inter alia, (1) entering "text[ ] ... and image information" into a remote data terminal, (2) "data-compressing the image data," (3) "receiving" the text and image data, creating multiple "unique records" before "storing," "locating" and "transmitting" the text and image data separately, (4) "de-compressing the images ... at the ... remote data terminal," and (5) "displaying the de-compressed images along with textual information."[15]

The Federal Circuit then cited to Electric Power Group and found that the claim recited an abstract idea by providing little rationale other than stating that "[w]e have previously determined that similar claims are directed to patent-ineligible subject matter."[16]

In May 2019's Uniloc USA Inc. v. ADP LLC decision, the Federal Circuit analyzed a license management method "that indicates a user's authorization to access an application."[17] The claim recited: "provid[e] an unavailability indication ... or an availability indication," based on "at least one of a user identity based policy, an administrator policy override definition or a user policy override definition."[18] The Federal Circuit concluded that "[t]his is an abstract idea" because it "does 'not go beyond requiring the collection, analysis, and display of available information.'"[19]

And, in June's Cellspin Soft Inc. v. Fitbit Inc. decision, the Federal Circuit analyzed a claim with 12 elements and over 400 words, directed to "acquiring and transferring data from a Bluetooth-enabled data capture device."[20] The Federal Circuit found the claim was directed to an abstract idea by summarizing it as "drawn to the idea of capturing and transmitting data from one device to another."[21] The Federal Circuit has therefore shown a willingness to broaden Electric Power Group's application and dramatically summarize claims to fit within its holding.

Suggestions

When drafting a patent application for a software invention that involves data gathering, analysis and display (or something similar), software patent practitioners should be very careful when drafting the specification in addition to the claims. The Federal Circuit will analyze the specification in detail to determine whether the patent is directed to patent-eligible subject matter, such as when the claimed invention improves over the prior art, the claimed invention improves the functioning of the computer itself or the claimed invention reflects a technical solution to a technical problem.

In ChargePoint Inc. v. SemaConnect Inc., the Federal Circuit examined the specification in detail to determine that the claims were directed to an abstract idea, because the specification was functionally drafted with few technical details.[22] In McRO Inc. v. Bandai Namco America Inc., the Federal Circuit reviewed the specification in determining that the invention improved over prior art and was therefore patent eligible.[23] In Enfish, the Federal Circuit reviewed the specification in finding that the claims were patent eligible by improving the functioning of the computer itself, and in DDR Holdings LLC v. Hotels.com LP, the Federal Circuit reviewed the specification in finding that the claims were patent eligible by reciting a technical solution to a technical problem.[24]

As a result, practitioners should draft the specification with sufficient technical details and not just functionally. Where possible, explain how the invention improves over the prior art, how it improves the functioning of the computer itself, how it addresses a technical solution to a technical problem or how it affects an improvement in another technology or technical field. Remember, Alice provided two safe harbors to which practitioners should avail themselves whenever possible: (1) where the claim improves the functioning of the computer itself or (2) where the claim effects an improvement in another technology or technical field.

As to claim drafting when the invention involves data gathering, analysis and display (or something similar), avoid functional claiming and add specifics where possible. This will assist in defending against a charge that the claims preempt all uses of the recited data gathering, analysis and display.

Conclusion

In Electric Power Group, the Federal Circuit combined several abstract ideas to create a new one that may implicate many software inventions.[25] Also, the Federal Circuit has shown a willingness to summarize lengthy claims to fit within Electric Power Group's holding. Practitioners therefore need to draft specifications and claims very carefully when the subject matter could be summarized as data gathering, analysis and display or something similar.

Practitioners should draft patent specifications and claims with sufficient technical details, rather than functionally. Not only will this avoid Section 101 issues, but the additional technical details in the specification and claims will improve patent quality by providing fair notice and adequate disclosure.

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[1] Enfish, LLC v. Microsoft Corp., 822 F.3d 1327, 1335 (Fed. Cir. 2016).

[2] Elec. Pwr. Group v. Alstom S.A., 830 F.3d 1350, 1351 (Fed. Cir. 2016).

[3] Voit Technologies LLC v. Del-Ton, Inc., 757 Fed.Appx. 1000 (Fed. Cir. 2019) (non-precedential).

[4] Cellspin Soft, Inc. v. Fitbit, Inc., 927 F.3d 1306, 1315 (Fed. Cir. 2019).

[5] Alice Corp. v. CLS Bank International, 573 U.S. 208 (2014).

[6] Id. at 221-26.

[7] Elec. Pwr. Group, 830 F.3d at 1353-54.

[8] Id.

[9] Id. at 1354.

[10] Id.

[11] TDE Petroleum Data Sols, Inc. v. AKM Enterprise, Inc., 657 Fed.Appx. 991 (Fed. Cir. 2016) (non-precedential).

[12] FairWarning IP, LLC v. Iatric Sys., Inc., 839 F.3d 1089, 1093-95 (Fed. Cir. 2016).

[13] W. View Research, LLC v. Audi AG, 685 F. Appx. 923, 925-27 (Fed. Cir. 2017) (non-precedential).

[14] Two-Way Media Ltd. v. Comcast Cable Commc'ns, LLC, 874 F.3d 1329, 1337 (Fed. Cir. 2017), cert. denied, 139 S. Ct. 378, 202 L. Ed. 2d 288 (2018).

[15] Voit, 757 Fed. Appx at 1003.

[16] Id.

[17] Uniloc USA, Inc. v. ADP, LLC, 772 F. Appx. 890, 892 (Fed. Cir. 2019) (non-precedential).

[18] Id.

[19] Id.

[20] Cellspin, 927 F.3d at 1310.

[21] Id. at 1315.

[22] ChargePoint, Inc. v. SemaConnect, Inc., 920 F.3d 759, 768-72 (Fed. Cir. 2019).

[23] McRO Inc. v. Bandai Namco, Am. Inc., 837 F.3d 1299, 1313 (Fed. Cir. 2016) ("As the specification confirms, the claimed improvement here is allowing computers to produce 'accurate and realistic lip synchronization and facial expressions in animated characters' that previously could only be produced by human animators.").

[24] Enfish, 822 F.3d 1327; DDR Holdings, LLC v. Hotels.com, L.P., 773 F.3d 1245 (Fed. Cir. 2014).

[25] Elec. Pwr. Group, 830 F.3d at 1353-54.