

CAFC Finds Software Patent Eligible Under 35 U.S.C. §101

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The Federal Circuit in Enfish LLC v. Microsoft reverses the California District Court decision that several patents related to a “self-referential” database were invalid as ineligible under 35 U.S.C. §101.

Overview

On May 12, 2016, the Federal Circuit awarded a victory for software patents — finding that the claims of two software patents directed to an innovative logical model for a computer database were patent-eligible under 35 U.S.C § 101¹. The Federal Circuit held that the claims at issue were not directed to an abstract idea, and instead were directed to a specific improvement to the way computers operate — relying on the claims and the specification to support the holding. In its holding, the Federal Circuit recognized that software patents can be deemed patent eligible even if (i) the invention is run on a general purpose computer; and (ii) the improvement is not defined by reference to “physical components.”

Procedural Background

In 2012, Enfish filed suit against Microsoft, alleging that Microsoft's ADO.NET product infringed U.S. Patent Nos. 6,151,604 and 6,163,775². The '604 and '775 patents are directed to an innovative logical model for arranging data in a computer database. The patented logical model is different from conventional logical models because of a “self-referential property.” Specifically, the “self-referential property” arranges tables of data such that all data entities are included in a single table, with column definitions provided by rows in that same table.

Representative claim 17 of the '604 patent is reproduced below:

A data storage and retrieval system for a computer memory, comprising:

means for configuring said memory according to a logical table, said logical table including:

a plurality of logical rows, each said logical row including an object identification number (OID) to identify each said logical row, each said logical row corresponding to a record of information;

a plurality of logical columns intersecting said plurality of logical rows to define a plurality of logical cells, each said logical column including an OID to identify each said logical column; and

means for indexing data stored in said table.

¹ *Enfish LLC v. Microsoft Corp. et al.*, Case No.: 2015-1244 (May 12, 2016)

² *Enfish LLC v. Microsoft Corp. et al.*, No. 2:12-cv-07360 (2012)

The district court had previously concluded that “the claims were directed to the abstract idea of ‘storing, organizing, and retrieving memory in a logical table’ or, more simply, ‘the concept of organizing information using tabular formats.’” Enfish appealed and the Federal Circuit reversed the district court’s summary judgment ruling — finding that the claims of the ’604 and ’775 patents were not directed to an abstract idea. The Federal Circuit determined that the district court’s framing of the claims was improper, using language that will likely be welcome by patent owners and applicants alike: **“describing the claims at such a high level of abstraction and untethered from the language of the claims all but ensure that the exception to §101 swallow the rule.”**³

Protection for Software patents

The Federal Circuit clarified the proper analysis to undertake when determining whether claims at issue are directed to a patent ineligible concept (i.e., abstract idea). Specifically, when evaluating the first prong of the *Alice* test (the “directed to” inquiry), one “cannot simply ask whether the claims involve a patent-ineligible concept.”⁴ Rather, the proper analysis of the claims requires determining “whether their character as a whole is directed to excluded subject matter.”⁵

The Federal Circuit cautioned against overreaching with respect to the abstract idea prong of the § 101 test and software patents:

Nor do we think that claims directed to software, as opposed to hardware, are inherently abstract and therefore only properly analyzed at the second step of the *Alice* analysis. **Software can make non-abstract improvements to computer technology just as hardware improvements can, and sometimes the improvements can be accomplished through either route.** We thus see no reason to conclude that all claims directed to improvements in computer-related technology, including those directed to software, are abstract and necessarily analyzed at the second step of *Alice*, nor do we believe that *Alice* so directs. **Therefore, we find it relevant to ask whether the claims are directed to an improvement to computer functionality versus being directed to an abstract idea, even at the first step of the *Alice* analysis.**⁶

Specifically, the Federal Circuit inquired “whether the focus of the ’604 and ’775 patent claims is on the specific asserted improvement in computer capabilities (i.e., the self-referential table for a computer database) or, instead, on a process that qualifies as an “abstract idea” for which computers are invoked merely as a tool.”⁷

The Federal Circuit found that the claims were not directed to an abstract idea, but instead to a “specific improvement to the way computers operate, embodied in the self-referential table.”⁸ The “plain focus of the claims is on an improvement to computer functionality itself, not on economic or other tasks for which a computer is used in its ordinary capacity”⁹ — the claims are not simply directed to any form of storing tabular data, but rather are specifically directed to a self-referential table for a computer database that improves the way a computer stores and retrieves data in memory.

Takeaways - Quality Specifications are Key

In its determination, the Federal Circuit relied heavily on the detailed specification, which disparaged conventional data structures while also describing technical benefits of the patented invention, such as increased flexibility, faster search times, and smaller memory requirements.

³ *Enfish LLC v. Microsoft Corp. et al.*, Case No.L 2015-1244 at 14.

⁴ *Id.* at 10.

⁵ *Id.*

⁶ *Id.* at 11.

⁷ *Id.* at 11.

⁸ *Id.* at 12.

⁹ *Id.*

This emphasizes the importance of a strong specification which properly identifies not only the claimed invention, but also its technical benefits over conventional systems or methods — focusing on how the invention improves the actual functioning of a computer, even if the claimed invention can be implemented on a general purpose computer. Rather than shying away from a discussion of the state of the art, the patents here directly addressed it, which supported the story of invention that Enfish set forth.

Even though the '604 and '775 patent's improvement was not defined by reference to “physical components,” that alone was not enough to determine that the claims are directed to an abstract idea.¹⁰ The Federal Circuit recognized that “[m]uch of the advancement made in computer technology consists of improvements to software that, by their very nature, may not be defined by particular physical features but rather by logical structures and processes.”¹¹ shows that software patents can indeed be patent-eligible under §101, despite a lack of actual hardware components in the claims.

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¹⁰ *Id.* at 17.

¹¹ *Id.* at 17-18.



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