

## Federal Circuit Finds Improvement to Computer Memory Systems is Patent Eligible, and Not an “Abstract Idea” Under Alice, reversing District Court

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**SUMMARY**

On August 15, 2017, the Federal Circuit issued a decision in *Visual Memory LLC v. NVIDIA Corp.* that provides a favorable decision applicants and patentees can rely upon in seeking to obtain and defend patent claims directed to computer-implemented inventions. Specifically, the Federal Circuit held that a patent “claim[ing] an improvement to computer memory” is not directed to an abstract idea and is therefore patent-eligible under *Alice Corp. Pty Ltd. v. CLS Bank Int’l*, \_\_\_ U.S. \_\_\_, 134 S.Ct 2347 (2014).

### The Technology at Issue

The patent at issue provides a memory system with programmable operational characteristics that can be tailored for use with multiple different processors without the accompanying reduction in performance. The claimed technology overcame some of the disadvantages of the prior art memory systems that “lacked versatility because they were designed and optimized based on the specific type of processor selected for use in that system.”

### The District Court Decision

Visual Memory sued NVIDIA for infringing its U.S. Patent No. 5,953,740. The U.S. District Court for the District of Delaware granted NVIDIA’s motion to dismiss after ruling that the asserted claims were unpatentable under 35 U.S.C. § 101 as directed to an “abstract idea of categorical data storage.”

### The Federal Circuit’s Analysis of the Abstract Idea Exclusion

Under the Supreme Court’s *Alice* decision, the Federal Circuit, district courts, and the U.S. Patent and Trademark Office employ a two-step process for assessing whether claims are directed to patent-eligible subject matter under Section 101, namely:

1. “determine whether the claims at issue are directed to one of those patent-ineligible concepts,” such as an abstract idea, and
2. “analyze whether the claim elements, either individually or as an ordered combination, contain an ‘inventive concept’ that ‘transforms the nature of the claim into a patent-eligible application.’”

Beginning its analysis with *Alice* step one, the Court noted that it “must articulate with specificity what the claims are directed to... and ask whether the claims are directed to improvement to computer functionality versus being directed to an abstract idea.” The Court then referenced two recent cases, *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327 (Fed. Cir. 2016), and *Thales Visionix Inc. v. United States*, 850 F.3d 1343 (Fed. Cir. 2017), and determined that the ‘740 patent’s claims demonstrate that

they are directed to “an improved computer memory system, not to the abstract idea of categorical data storage” in which a computer is used merely as a tool.

In assessing the ‘740 patent claims, the Court recognized that the ‘740 patent’s teachings “obviate the need to design a separate memory system for each type of processor... and, at the same time, avoid the performance problems of prior art memory systems.” Analogizing the self-referential table in *Enfish* and the motion tracking systems in *Thales*, the Court concluded that the claims at issue “are directed to a technological improvement: an enhanced computer memory system.”

The Court faulted the district court’s reliance on “the patent-ineligible claims in *Content Extraction & Transmission LLC v. Wells Fargo Bank*, 776 F.3d 1343 (Fed. Cir. 2014) and *In re TLI Communications LLC Patent Litigation*, 823 F.3d 607 (Fed. Cir. 2016)” as “misplaced.” The Court stated that “[t]he claims in *Contract Extraction* and *TLI Communications* were not directed to an improvement in computer functionality, which separates the claims in those cases from the claims in the current case.”

Finding that the asserted claims are not directed to an abstract idea, the Federal Circuit did not reach step two of *Alice*, and rather concluded that the claims are patent-eligible.

## Patent-Eligibility for Computer-Implemented Inventions

This decision provides another helpful fact pattern for application of the first *Alice* step that can be used by both patent applicants and patentees.

The *Visual Memory* decision follows the Federal Circuit’s 2016 *Enfish* decision. In *Enfish*, the claimed invention was directed to “an improvement in the functioning of a computer,” as contrasted with “simply adding conventional computer components to well-known business practices,” and thus satisfies step one of the software *Alice* framework. This rationale provides help and support for the patentability of many software patent applications, namely those that include claims reciting a specific improvement to existing technologies.

In *Visual Memory*, the Federal Circuit adopted a classic common law approach for analyzing patent eligibility without citing

*Amdocs (Israel) Limited v. Openet Telecom, Inc.*, 841 F.3d 1288 (Fed. Cir. 2016), in which the Federal Circuit explicitly stated that “the decisional mechanism courts now apply is to examine earlier cases in which a similar or parallel descriptive nature can be seen.”

In conclusion, the *Visual Memory* court provides a favorable decision under step one of the *Alice* analysis. *Visual Memory*, *Enfish*, *BASCOM Global Internet Services, Inc. v. AT&T Mobility LLC*, 827 F.3d 1341 (Fed. Cir. 2016), and *McRO, Inc. v. Bandai Namco Games America*, 837 F.3d 1299 (Fed. Cir. 2016), (upholding claims under step one of the *Alice* inquiry) are emerging post-*Alice* decisions that provide examples of claims that are patentable under *Alice*. Given the common law approach adopted by the Federal Circuit, these decisions provide “guideposts” that applicants and patentees can use in seeking to obtain and defend claims directed to computer-implemented inventions.

In view of the continuing legal developments regarding the patentability of computer-implemented inventions, applicants continue to be well-served by developing patent applications that tell a problem/solution story, and that provide improvements over and solutions to disadvantages of prior art technology.

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