

Ancora Tech. v. HTC – Yet Another Federal Circuit Decision Finding A
Computer-Based Invention Patent Eligible Under Alice/Mayo Step One
by Kirk Coombs

On November 16, 2018 the [United States Court of Appeals for the Federal Circuit](#) (CAFC) decided [Ancora Technologies, Inc. v. HTC America, Inc.](#) (*Ancora*), a precedential decision finding claims around a “Method of Restricting Software Operation Within a License Limitation” to be patent-eligible under the Alice/Mayo framework for determining subject matter eligibility under 35 U.S.C. §101. Under the Alice/Mayo framework, a court considers (1) whether the subject claim, as a whole, is “directed to” patent-ineligible subject matter (often an “abstract idea” for computer-based inventions) and (2) if so, whether the elements of the claim, considered individually or as an ordered combination, transform the nature of the claim into a patent-eligible application. *Ancora* adds to a growing number of CAFC decisions holding computer-based inventions to be patent-eligible under Step One of this framework.

A foundational decision was [Enfish, LLC v. Microsoft Corp.](#) (*Enfish*) in May 2016, which held that the claims before the court were not directed to an abstract idea because the claimed self-referential data tables improved the way that computers operated and handled data; for example the claimed self-referential tables allowed the more efficient launching and adaptation of databases. In *Enfish*, the CAFC provided guidance that, in cases involving software innovations, the inquiry of whether claims are “directed to” patent-ineligible subject matter (i.e., Alice/Mayo Step One) often turns on whether the claims focus on “the specific asserted improvement in computer capabilities or, instead, on a process that qualifies as an “abstract idea” for which computers are invoked merely as a tool.” Later, in August 2017, the court decided [Visual Memory LLC v. Nvidia Corporation](#) (*Visual Memory*), which relied on the *Enfish* guidance to find that claims that were directed to an improved memory system—that configure operational characteristics of a computer’s cache memory based on the type of processor connected to the memory system—allowed the claimed invention to accommodate different types of processors without compromising performance, an improvement in computer functionality and therefore patent-eligible under Step One. *Visual Memory* was then followed by [Finjan, Inc. v. Blue Coat System, Inc.](#) (January 2018) which held that claims to a behavior-based virus scan that enabled more flexible and nuanced virus filtering and detection of potentially dangerous code were a specific improvement in computer functionality and hence not directed to an abstract idea under Step One, [Core Wireless](#)

Ancora Tech. v. HTC – Yet Another Federal Circuit Decision Finding A
Computer-Based Invention Patent Eligible Under Alice/Mayo Step One
by Kirk Coombs

Licensing S.A.R.L. v. LG Electronics, Inc. (January 2018) which held that claims to a method for making websites easier to navigate on a small-screen device were directed to a specific type of index for a specific type of user and so not directed to an abstract idea under Step One, and *Data Engine Technologies LLC v. Google LLC* (October 2018) which held that claims to a specific method for navigating through three-dimensional electronic spreadsheets recite a specific structure (i.e., notebook tabs) within a particular spread-sheet display that performs a specific function (i.e., navigating within a three-dimensional spreadsheet) and were not directed to an abstract idea under Step One.

Returning to *Ancora*, the patent at issue ([U.S. Patent 6,411,941](#)) describes an improvement to identifying and restricting of an unauthorized software program's operation that operates, based on assigning certain functions to particular computer components and having them interact in specified ways. A proposed method relies on the use of a *key* and of a *record*. A key is "a unique identification code" for a given computer, and is embedded in the read-only memory (ROM) of the computer's Basic Input Output System (BIOS) module so that the key cannot be removed or modified. A record is a "license record" associated with a particular application. The method uses a modifiable part of the BIOS memory—not other computer memory—to store the information (a "verification structure") that can be used, when a program is introduced into the computer, to determine whether the program is licensed to run on that computer. The '941 patent asserts that using BIOS memory, rather than other memory in the computer, improves computer security because successfully hacking BIOS memory is much harder than hacking the memory used by the prior art to store license-verification information (e.g., a computer's hard drive). Claim 1 was the relevant claim at issue:

1. A method of restricting software operation within a license for use with a computer including an erasable, non-volatile memory area of a BIOS of the computer, and a volatile memory area; the method comprising the steps of:

selecting a program residing in the volatile memory,

Ancora Tech. v. HTC – Yet Another Federal Circuit Decision Finding A
Computer-Based Invention Patent Eligible Under Alice/Mayo Step One
by Kirk Coombs

using an agent to set up a verification structure in the erasable, non-volatile memory of the BIOS, the verification structure accommodating data that includes at least one license record,

verifying the program using at least the verification structure from the erasable non-volatile memory of the BIOS, and

acting on the program according to the verification.

Relying on the precedents described above, the CAFC observed that “improving security—here, against a computer’s unauthorized use of a program—can be a non-abstract computer-functionality improvement if done by a specific technique that departs from earlier approaches to solve a specific computer problem” and found that “the claim addresses a technological problem with computers: vulnerability of license-authorization software to hacking.” Ultimately, the court concluded that “claim 1 of the ‘941 patent is directed to a solution to a computer-functionality problem: an improvement in computer functionality that has the specificity required to transform a claim from one claiming only a result to one claiming a way of achieving it,” and that “It therefore passes muster under Alice step one, as it is not directed to patent-ineligible subject matter. We need not and do not apply step two of the Alice analysis.”

For patent applicants and patentees, *Ancora* provides welcome additional affirmation by the CAFC of the patentability of software-based innovations, along with an additional example of an innovation that represents a patent-eligible improvement to computer capabilities.