The Federal Circuit last week handed down the latest in a series of decisions finding computer-implemented inventions to be patent-eligible under 35 U.S.C. § 101. In McRO, Inc. v. Bandai Namco Games America, Inc. et al. (Fed. Cir. Sept. 13, 2016), the Federal Circuit held that claims directed to software for automatically animating lip synchronization and facial expressions of animated characters were not directed to an abstract idea under the first prong of the Alice test, and therefore recited patent-eligible subject matter. McRO joins a growing list of Federal Circuit cases that find computer-implemented inventions to be non-abstract, including DDR Holdings, Enfish, and BASCOM.

Claim 1 of U.S. Patent No. 6,307,576, which was considered by the Federal Circuit to be representative of the asserted claims, reads as follows:

1. A method for automatically animating lip synchronization and facial expression of three-dimensional characters comprising:

   obtaining a first set of rules that define output morph weight set stream as a function of phoneme sequence and time of said phoneme sequence;

   obtaining a timed data file of phonemes having a plurality of sub-sequences;

   generating an intermediate stream of output morph weight sets and a plurality of transition parameters between two adjacent morph weight sets by evaluating said plurality of sub-sequences against said first set of rules;

   generating a final stream of output morph weight sets at a desired frame rate from said intermediate stream of output morph weight sets and said plurality of transition parameters; and

   applying said final stream of output morph weight sets to a sequence of animated characters to produce lip synchronization and facial expression control of said animated characters.

At the District Court, the claims were initially held invalid on a 12(c) motion as being directed to an unpatentable abstract idea. In its ruling, the District Court focused largely on notions of preemption (a theme which also weighed heavily in the subsequent Federal Circuit decision). The District Court characterized the inventive contribution of the asserted patents as using rules, rather than human artists, to set the morph weights and transitions between phonemes when animating characters. In the District Court’s view, the claims were not limited to specific rules, but rather purported to cover all such rules and were therefore too broadly preemptive to satisfy § 101.
The Federal Circuit reversed on appeal. As an initial matter, the Federal Circuit undertook a claim construction analysis, interpreting the claimed “first set of rules” as being limited to rules that evaluate sub-sequences consisting of multiple sequential phonemes. Under this interpretation, it was found that the claims covered not just any rules-based approach for achieving automatic lip synchronization, but rather only those approaches in which the rules evaluate multiple sequential phonemes.

Accordingly, while the claims may not recite a particular species of rules to be applied, they are still limited to a particular genus of rules (i.e., those that evaluate sequences of multiple phonemes) and therefore do not preempt all rules-based techniques for solving the problem at hand.

The defense had argued that the claimed process merely involved automating a prior art manual animation technique using a computer. Relying again on its claim construction, the Federal Circuit disagreed, noting that the prior human approach did not use rules that evaluated sequences of multiple phonemes. The claimed method thus recited more than simply implementing a previous human technique on a computer. It was this incorporation of the claimed rules, not the mere computer implementation, that improved the existing technological process for lip-synchronization.

Looking at the claim as a whole, the Federal Circuit held that claim 1 was “directed to a patentable, technological improvement over the existing, manual 3-D animation techniques” and that claim 1 “uses the limited rules in a process specifically designed to achieve an improved technological result in conventional industry practice.” Having found that the claims survived the first step of the Alice test, the Federal Circuit declined to consider the second step.

The extensive discussion and weighing of preemption in McRO’s abstract idea analysis makes the opinion somewhat unique as compared with the Federal Circuit’s previous § 101 jurisprudence. In view of McRO, preemption arguments should be considered when evaluating or litigating § 101 issues. Also, it may be advisable when claiming computer-implemented inventions to include claims of varying breadth, with some directed to a very specific solution and others that cover a broader genus of solutions without preempting all possible solutions.

Tags: Abstract Ideas, Federal Circuit, Patents, Software, § 101 / Patentable Subject Matter