



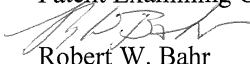
UNITED STATES PATENT AND TRADEMARK OFFICE

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MEMORANDUM

DATE: November 2, 2016

TO: Patent Examining Corps

FROM: 
Robert W. Bahr
Deputy Commissioner
for Patent Examination Policy

SUBJECT: Recent Subject Matter Eligibility Decisions

The U.S. Court of Appeals for the Federal Circuit (Federal Circuit) has issued a number of subject matter eligibility decisions since the May 2016 Update to the USPTO's subject matter eligibility (SME) guidance. These decisions do not change the basic subject matter eligibility framework explained in the SME guidance and training examples, but provide additional information about finding eligibility for software claims. Accordingly, the USPTO will be updating its SME guidance in view of these decisions and feedback from patent stakeholders.

This memorandum provides a discussion of two of the recent decisions identifying eligible subject matter, namely *McRO, Inc. dba Planet Blue v. Bandai Namco Games America Inc.*, 120 USPQ2d 1091 (Fed. Cir. 2016) and *BASCOM Global Internet Services v. AT&T Mobility LLC*, 827 F.3d 1341 (Fed. Cir. 2016). Yesterday, the Federal Circuit issued another precedential decision finding eligibility (*Amdocs (Israel) Ltd. v. Openet Telecom, Inc.*, No. 2015-1180 (Fed. Cir. Nov. 1, 2016)), which will be discussed further in the forthcoming update to the SME guidance, along with *McRO*, *BASCOM*, and other recent decisions concerning patent eligibility.¹ These decisions have also been added to the chart of court decisions available on the USPTO's [SME Webpage](#).

¹ Other decisions since the May 2016 Update to the USPTO's SME guidance finding eligibility (*Rapid Litigation Management Ltd. v. CellzDirect, Inc.*, 827 F.3d 1042 (Fed Cir. 2016), and *Ernfish, LLC, v. Microsoft Corp.*, 822 F.3d 1327 (Fed Cir. 2016)) have been discussed in prior memoranda, which are available on the USPTO's [SME Webpage](#). In addition, there also have been a number of precedential decisions since the May 2016 Update to the USPTO's SME guidance finding ineligibility. See *Synopsys v. Mentor Graphics Corp.*, 2016 WL 6068920 (Fed. Cir. 2016), *FairWarning IP, LLC v. Iatric Systems*, 120 USPQ2d 1293 (Fed. Cir. 2016), *Intellectual Ventures I LLC v. Symantec Corp.*, 120 USPQ2d 1353 (Fed Cir. 2016), *Affinity Labs of TX, LLC v. DirectTV, LLC*, 120 USPQ2d 1201 (Fed Cir. 2016), *Affinity Labs of TX, LLC, v. Amazon.com Inc.*, 120 USPQ2d 1210 (Fed Cir. 2016), *Electric Power Group, LLC v. Alstom S.A.*, 830 F.3d 1350 (Fed Cir. 2016), and *In re TLI Communications LLC Patent Litigation*, 823 F.3d 607 (Fed Cir. 2016).

McRO: In *McRO*, the Federal Circuit held the claimed methods of automatic lip synchronization and facial expression animation using computer-implemented rules **patent eligible** under 35 U.S.C. § 101, because they were not directed to an abstract idea (Step 2A of the USPTO’s SME guidance). The basis for the *McRO* court’s decision was that the claims were directed to an improvement in computer-related technology (allowing computers to produce “accurate and realistic lip synchronization and facial expressions in animated characters” that previously could only be produced by human animators), and thus did not recite a concept similar to previously identified abstract ideas.

As part of its analysis, the *McRO* court examined the specification, which described the claimed invention as improving computer animation through the use of specific rules, rather than human artists, to set morph weights (relating to facial expressions as an animated character speaks) and transition parameters between phonemes (relating to sounds made when speaking). As explained in the specification, human artists did not use the claimed rules, and instead relied on subjective determinations to set the morph weights and manipulate the animated face to match pronounced phonemes. The *McRO* court thus relied on the specification’s explanation of how the claimed rules enabled the automation of specific animation tasks that previously could not be automated when determining that the claims were directed to improvements in computer animation instead of an abstract idea. The *McRO* court indicated that it was the incorporation of the particular claimed rules in computer animation that “improved [the] existing technological process”, unlike cases such as *Alice* where a computer was merely used as a tool to perform an existing process.

The *McRO* court cautioned that courts “must be careful to avoid oversimplifying the claims” by looking at them generally and failing to account for the specific requirements of the claims. The *McRO* court also noted that the claims at issue described a specific way (use of particular rules to set morph weights and transitions through phonemes) to solve the problem of producing accurate and realistic lip synchronization and facial expressions in animated characters, rather than merely claiming the idea of a solution or outcome, and thus were not directed to an abstract idea.

Notable Points from *McRO*: Examiners should consider the claim as a whole under Step 2A of the USPTO’s SME guidance, and should not overgeneralize the claim or simplify it into its “gist” or core principles, when identifying a concept as a judicial exception. See also the discussion of identifying an abstract idea in the May 4, 2016 Memorandum (in Section II.A) and the discussion of claims directed to improvements in computer-related technology in the May 19, 2016 Memorandum about *Enfish*, which is available on the USPTO’s [SME Webpage](#).

An “improvement in computer-related technology” is not limited to improvements in the operation of a computer or a computer network *per se*, but may also be claimed as a set of “rules” (basically mathematical relationships) that improve computer-related technology by allowing computer performance of a function not previously performable by a computer.

An indication that a claim is directed to an improvement in computer-related technology may include—

- (1) a teaching in the specification about how the claimed invention improves a computer or other technology (*e.g.*, the *McRO* court relied on the specification’s explanation of how the claimed rules enabled the automation of specific animation tasks that previously

could not be automated when determining that the claims were directed to improvements in computer animation instead of an abstract idea). In contrast, the court in *Affinity Labs of TX v. DirecTV* relied on the specification's failure to provide details regarding the manner in which the invention accomplished the alleged improvement when holding the claimed methods of delivering broadcast content to cellphones directed to an abstract idea.

(2) a particular solution to a problem or a particular way to achieve a desired outcome defined by the claimed invention, as opposed to merely claiming the idea of a solution or outcome (e.g., *McRO*'s claims defined a specific way, namely use of particular rules to set morph weights and transitions through phonemes, to solve the problem of producing accurate and realistic lip synchronization and facial expressions in animated characters, and thus were not directed to an abstract idea). In contrast, *Electric Power Group*'s claimed method was directed to an abstract idea because it merely presented the results of collecting and analyzing information, without even identifying a particular tool for the presentation.

BASCOM: In *BASCOM*, the Federal Circuit vacated a judgment of ineligibility because the district court failed to properly perform the second step of the *Mayo/Alice* framework (Step 2B of the USPTO's SME guidance) when analyzing a claimed system for filtering content retrieved from an Internet computer network. The *BASCOM* court agreed that the additional elements were generic computer, network, and Internet components that did not amount to significantly more when considered individually, but explained that the district court erred by failing to recognize that when combined, an inventive concept may be found in the non-conventional and non-generic arrangement of the additional elements, i.e., the installation of a filtering tool at a specific location, remote from the end-users, with customizable filtering features specific to each end user (note that the term "inventive concept" is often used by the courts to describe additional element(s) that amount to significantly more than a judicial exception).

Notable Point from *BASCOM*: In Step 2B of the USPTO's SME guidance, examiners should consider the additional elements in **combination**, as well as individually, when determining whether a claim as a whole amounts to significantly more, as this may be found in the non-conventional and non-generic arrangement of known, conventional elements. See also the discussion of evaluating combinations of additional elements in the May 4, 2016 Memorandum (in Section II.B), and the July 2015 Update (in Section I).

Preemption: Several recent decisions discuss the role of preemption in the eligibility analysis, and the Office will be addressing preemption in more detail in its forthcoming update to its SME guidance. Specifically, some recent decisions discuss the absence of preemption as confirming the analysis that the claimed invention is not directed to a judicial exception (*CellzDirect*) or includes an inventive step (*BASCOM*). The *McRO* court discusses the absence of preemption in determining that the claimed invention was not "directed to" a judicial exception. Other decisions, however, do not consider the absence of preemption as conferring patent eligibility (e.g., *Synopsys*, *FairWarning*, *Intellectual Ventures v. Symantec*, *Sequenom*, and *OIP*).

Examiners should continue to use the *Mayo/Alice* framework (incorporated as Steps 2A and Step 2B of the USPTO's SME guidance and further discussed in this memorandum) to resolve questions of preemption. If applicant argues that a claim does not preempt all applications of the exception, an examiner should reconsider in Step 2A of the eligibility analysis whether the claim is directed to an improvement in computer-related technology or a specific way of achieving a desired outcome or end result (as discussed in the *McRO* section of this memorandum and the USPTO's prior SME guidance). If an examiner still determines that the claim is directed to a judicial exception, the examiner should then reconsider in Step 2B of the eligibility analysis whether the additional elements **in combination** (as well as individually) are more than the non-conventional and non-generic arrangement of known, conventional elements.

Non-precedential decisions: Finally, given the large and ever-increasing number of precedential decisions, examiners should avoid relying upon or citing non-precedential decisions (e.g., *SmartGene*, *Cyberfone*) unless the facts of the application under examination uniquely match the facts at issue in the non-precedential decision. The updated chart of court decisions available on the USPTO's [SME Webpage](#) indicates whether a decision is precedential or non-precedential.