From: John D. Vandenberg

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To: Eligibility2018

Subject: Comments on Berkheimer Memo. (PTO-P-2018-0033)

On April 27, 2018, I submitted comments (copied below) citing five Supreme Court precedents collectively stating that a claim's "additional elements"—beyond a claim's abstract idea or other ineligible subject matter—must be novel and non-obvious (i.e., "inventive") to transform the claim into patent-eligible subject matter. I noted that the April 19, 2018, Berkheimer Memorandum could be read to deviate from this governing law, by removing "inventive" from step two of the *Alice* test. I added that history urges caution, as the Office before was led by some stakeholders to deviate from the *Benson* and *Flook* precedents, causing it to issue thousands of (invalid) patents that could not be squared with those precedents, only to have the Supreme Court endorse *Benson* and *Flook* in *Mayo* and *Alice* without hesitation or qualification. The Office and many of its stakeholders then did not agree with *Benson* and *Flook* and today do not agree with *Alice*, but only Congress and the Supreme Court are in a position to correct whatever needs correction.

I write again because more recent commenters not only applaud the Office removing "inventive" from "inventive concept" but urge it to also remove "additional" from "additional elements." The AIPLA, for example, "suggests dropping the word 'additional' in all uses of this phrase." (AIPLA Comments, dated Aug. 13, 2018, p. 2). Removing "inventive" and "additional" from step two, amounts, as urged by the AIPLA, to instructing examiners "to determine whether all elements of a claim, both alone and in combination, are well-understood, routine, and conventional."

Erasing "additional" cannot be squared with governing case precedents any more than erasing "inventive."

Under *Alice* Step Two, a claim directed to an abstract idea may nevertheless be patent eligible if it also recites a "saving inventive concept" in application of the idea, *Two-Way Media Ltd. v. Comcast Cable Commc'ns, LLC,* 874 F.3d 1329, 1338 (Fed. Cir. 2017) (affirming Rule 12(c) judgment on the pleadings of Section 101 invalidity), that adds "significantly more" to the abstract idea, *Alice,* 134 S. Ct. at 2355, 2357. This requires an "innovation in the non-abstract application realm." *SAP Am.,* 890 F.3d at 1022; *accord buySAFE, Inc. v. Google, Inc.,* 765 F.3d 1350, 1353 (Fed. Cir. 2014) (affirming Rule12(c) judgment on the pleadings of Section 101 invalidity, and requiring "a 'new and useful application' of the ineligible matter in the physical realm").

Before determining whether claim elements provide an "inventive concept' in application" of the abstract idea, *SAP Am.*, 890 F.3d at 1023, a court first must identify those claim elements that are not abstract, *id.* at 1022–23. This is essential because the "inventive concept in application" analysis of Step Two addresses the "additional elements" the claim appends to the abstract idea, *not* the abstract idea itself. The Supreme Court made this distinction repeatedly in *Mayo* and *Alice*, referring to "additional elements," "additional features," "other elements," "additional steps," "other steps," steps "apart from" the abstract idea or natural law, and "what else is there?" *Alice*, 134 S. Ct. at 2355, 2357–2358; *Mayo*, 566 U.S. at 72, 73, 77–81, 90. Thus, the

"ordered combination" of "additional elements" the *Alice* Court analyzed in Step Two are the claims' "computer components," not the abstract idea identified in Step One. *Alice*, 134 S. Ct. at 2350; *accord SAP Am.*, 890 F.3d at 1023 ("Because bootstrap, jackknife, and cross-validation methods are all 'particular methods of resampling,' those features simply provide further narrowing of what are still mathematical operations. They add nothing outside the abstract realm.").

As a Federal Circuit panel reiterated this week:

the relevant inquiry is not whether the claimed invention as a whole is unconventional or non-routine.... A claimed invention's use of the ineligible concept to which it is directed cannot supply the inventive concept that renders the invention 'significantly more' than that ineligible concept.... As a matter of law, narrowing or reformulating an abstract idea does not add 'significantly more' to it.

BSG Tech. LLC v. Buyseasons, Inc., No. 2017-1980 (Fed. Cir. Aug. 15, 2018).

The Office and many of its stakeholders may not agree with the above-cited precedents but the law is clear—the "inventive concept" in step two is an inventive application of the abstract idea in the physical, non-abstract realm, not an inventive abstraction. Therefore, erasing "additional" from "additional elements" would be contrary to law, as would erasing "inventive" from step two's requirements.

Thank you for considering these comments, which are made solely on my own behalf.

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Copy of Comments Submitted April 27, 2018

Under Supreme Court precedents governing Step Two, "inventive" means novel and non-obvious.

The April 19, 2018, Berkheimer Memorandum risks leading Examiners to approve patent claims that are patent ineligible under the governing U.S. Supreme Court precedents of *Benson*, *Flook, Mayo* and *Alice*. As quoted below, these precedents. Routine, well-known and conventional elements are clear examples of non-inventive elements, but are not the only elements failing this requirement that the additional element(s) be novel and not obvious.

Alice Corp. Pty. Ltd. v. CLS Bank Int'l, 134 S. Ct. 2347, 2357-58 (2014), in describing Step Two, explained Benson as having required the additional element to be both novel and useful:

"In *Benson*, for example, we considered a patent that claimed an algorithm implemented on 'a general-purpose digital computer.' Because the algorithm was an abstract idea, the claim had to supply a 'new and useful' application of the idea in order to be patent eligible. But the computer implementation did not supply the necessary inventive concept; the process could be 'carried out

in existing computers long in use.' We accordingly 'held that simply implementing a mathematical principle on a physical machine, namely a computer, [i]s not a patentable application of that principle.'"

Thus, per *Benson* and *Alice*, an "inventive concept" is "necessary," and to be "inventive," the machine or other additional element must at least be "new." That the machine was "long in use" made it clear that the machine was not novel or inventive.

Parker v. Flook, 437 U.S. 584, 590, 594 (1978), in its Step Two analysis, held that the additional element must not be "obvious":

"The notion that post-solution activity, no matter how conventional or obvious in itself, can transform an unpatentable principle into a patentable process exalts form over substance." "Respondent's process is unpatentable under § 101, ... because once that algorithm is assumed to be within the prior art, the application, considered as a whole, contains no patentable invention." "Here it is absolutely clear that respondent's application contains no claim of patentable invention. The chemical processes involved in catalytic conversion of hydrocarbons are well known...."

Thus, the additional element must qualify as a patentable invention and not be obvious. That the additional elements here were "well known" made it "absolutely clear" that they were not inventive.

Mayo Collaborative Servs. v. Prometheus Labs., 132 S. Ct. 1289, 1299 (2012) explained that the additional elements in *Diehr* were not obvious: "it nowhere suggested that all these steps, or at least the combination of those steps, were in context obvious, already in use, or purely conventional.... These other steps apparently added to the formula something that in terms of patent law's objectives had significance—they transformed the process into an inventive application of the formula."

Thus, again, the Court expressly equated Step Two's demand that the additional element(s) (not the abstract idea) provide an "inventive" application with a requirement that the additional element(s) not be "obvious."

The Supreme Court's oft repeated mandate that the additional element(s) be novel and not obvious (i.e., inventive), is not, of course, an application of either Sec. 102 or 103, as the Supreme Court has made clear. For example, those distinct statutory requirements are applied to the claim as a whole. Step Two is not. Therefore, a patent claim's subject matter as a whole may be new and innovative, because its abstract idea is new and innovative, yet the claim be patent ineligible.

While the Memorandum states that it addresses a limited question, it nevertheless appears to endorse a different, and substantially more lenient, version of Step Two. Rather than follow the Supreme Court's mandate that the additional element(s) be novel and not obvious (i.e., inventive), the entire Memorandum strongly implies that the additional element(s) will satisfy Step Two—and require the Examiner to find the claim patent eligible—so long as it is not "well-understood, routine, and conventional." Even if that is not the intended message, there is a risk that many Examiners will so understand the Memorandum, in part because it does not quote any of the above Supreme Court statements describing the required Step Two analysis.

While the Office may not agree with these Supreme Court precedents, the patent system already has suffered from the Patent Office being led away from the *Benson* and *Flook* precedents and issuing thousands of (invalid) patents that could not be squared with those precedents, only to have the Supreme Court endorse *Benson* and *Flook* in *Mayo* and *Alice* without hesitation or qualification. The Office should therefore be especially cautious before repeating that experience. At the very least, it should wait to see how the recent panel decisions fare and whether any later panels persuasively address the above-quoted statements by the Supreme Court regarding Step Two.

These comments are solely on my own behalf.

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