

OBJECTIVE INDICIA OF PATENT ELIGIBILITY:  
THE ROLE OF SECONDARY CONSIDERATIONS  
IN THE *ALICE* INQUIRY

*Kee Young Lee*\*

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\*J.D. Candidate, Harvard Law School, 2020; M.S. in Electrical and Computer Engineering, Carnegie Mellon University, 2013. Many thanks to Ryan Petty for his helpful comments and insights.

In *Data Engine Technologies LLC v. Google LLC*,<sup>1</sup> the Federal Circuit added to a growing list of decisions holding software patent claims eligible after *Alice Corp. v. CLS Bank International*.<sup>2</sup> The Court held that certain claims directed to tabbed navigation of electronic spreadsheets are eligible under 35 U.S.C. § 101, while other claims directed to tracking changes in spreadsheets are not.<sup>3</sup> The Court holds its opinion out to be a straightforward application of its precedents. But the Court’s rationale is internally inconsistent and departs from the Court’s own precedents by further blurring the lines between the § 101 and §§ 102 and 103 inquiries.

The case originated in the District of Delaware, where Data Engine Technologies (“DET”) filed suit against Google, asserting claims in four patents.<sup>4</sup> Three of the patents (“Tab Patents”) described “systems and methods for making complex electronic spreadsheets more accessible by providing familiar, user-friendly interface objects—specifically, notebook tabs—to navigate through spreadsheets while circumventing the arduous process of searching for, memorizing, and entering complex commands.”<sup>5</sup> The remaining patent (“Track-changes Patent”) described methods for tracking changes in spreadsheets and managing “what-if” scenarios in data models.<sup>6</sup> These features are very familiar to users of modern-day spreadsheet software. But, as described in detail by the Court, Quattro Pro—a commercial embodiment of the claimed invention—was considered revolutionary at the time.<sup>7</sup>

Google moved for judgment on the pleadings under Rule 12(c), arguing that all of the asserted claims are directed to patent-ineligible subject matter under § 101.<sup>8</sup> The district court agreed with Google. It held that the Tab Patents’ claims are directed to an abstract idea “that humans have commonly performed entirely in their minds, with the

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<sup>1</sup> No. 2017-1135 (Fed. Cir. Oct. 9, 2018).

<sup>2</sup> 573 U.S. 208 (2014).

<sup>3</sup> *Data Engine Techs.*, slip op. at 2.

<sup>4</sup> *Id.* at 1–2.

<sup>5</sup> *Id.* at 3.

<sup>6</sup> *Id.* at 8.

<sup>7</sup> *Id.* at 5–6. The Quattro Pro was also the software at issue in the Supreme Court’s seminal decision on the copyrightability of software. See *Lotus Dev. Corp. v. Borland Int’l, Inc.*, 516 U.S. 233 (1996).

<sup>8</sup> *Data Engine Techs.*, slip op. at 10.

aid of columnar pads and writing instruments,” and that the additional limitations fail to recite an inventive concept.<sup>9</sup> The district court also held that the Track-changes Patent’s claims are directed to the abstract idea of “collecting spreadsheet data, recognizing changes to spreadsheet data, and storing information about the changes,” and that the additional limitations fail to recite an inventive concept.<sup>10</sup>

The Federal Circuit affirmed in part, reversed in part, and remanded.<sup>11</sup> First turning to the Tab Patents, the Court held the asserted claims eligible, with the exception of claim 1 of U.S. Patent No. 6,282,551.<sup>12</sup> The Court noted that the representative specification describes a technological problem specific to computers and prior art electronic spreadsheets, and that the representative claim recites a specific technical solution unique to computers.<sup>13</sup> The Court found the representative claim particularly analogous to claims held patent eligible in *Core Wireless Licensing S.A.R.L. v. LG Electronics, Inc.*<sup>14</sup> and *Trading Technologies International, Inc. v. CQG, Inc.*<sup>15</sup> Focusing on the specificity of the representative claim, the Court rejected Google’s arguments relying on prior cases where the Court held that claims reciting “methods of organizing and presenting information” are directed to abstract ideas.<sup>16</sup> The Court thus held that the representative claim is not directed to an abstract idea under step one of *Alice*, and therefore did not reach *Alice* step two.<sup>17</sup>

Claim 1 of the ‘551 patent was, in the Court’s view, materially different from the representative claim for purposes of determining patent eligibility.<sup>18</sup> The Court held that claim 1 of the ‘511 patent is directed to the

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<sup>9</sup> *Id.*

<sup>10</sup> *Id.* at 10–11.

<sup>11</sup> *Id.* at 2.

<sup>12</sup> *Id.* at 12–13.

<sup>13</sup> *Id.* at 13–15.

<sup>14</sup> 880 F.3d 1356 (Fed. Cir. 2018). *See id.* at 1362 (holding that claims directed to “an improved user interface for computing devices” that requires a “particular manner of summarizing and presenting information in electronic devices” are patent eligible).

<sup>15</sup> 675 F. App’x 1001 (Fed. Cir. 2017). *See id.* at 1004 (holding that claims directed to “improvements in existing graphical user interface devices” that require a “specific, structured graphical user interface paired with a prescribed functionality directly related to the graphical user interface’s structure” are patent eligible).

<sup>16</sup> *Data Engine Techs.*, slip op. at 17–20.

<sup>17</sup> *Id.* at 20.

<sup>18</sup> *Id.* at 21.

abstract idea of “identifying and storing electronic spreadsheet pages.”<sup>19</sup> Because this claim did not recite “the specific implementation of a notebook tab interface,” it was not limited to “the specific technical solution and improvement in electronic spreadsheet functionality” that rendered the representative claim patent eligible.<sup>20</sup> Turning to *Alice* step two, the Court found no additional elements sufficient to provide an inventive concept and held claim 1 of the ‘511 patent ineligible.<sup>21</sup>

The Court made quick work of the Track-changes Patent. At *Alice* step one, the Court determined that the asserted claims are directed to the abstract idea of “collecting spreadsheet data, recognizing changes to spreadsheet data, and storing information about the changes.”<sup>22</sup> The Court distinguished these claims from the representative claim of the Tab Patents, noting that the claims of the Track-changes Patent did not improve spreadsheet functionality in a specific way.<sup>23</sup> Finding no additional elements to provide an inventive concept under *Alice* step two, the Court held the asserted claims of the Track-changes Patent ineligible.<sup>24</sup>

Looking at each representative claim reproduced in the body of the opinion individually, the substantive conclusion reached by the Court appears correct. Neither the Federal Circuit nor the Supreme Court has been able to articulate a workable, universal definition of “abstract idea.”<sup>25</sup> So, to determine whether a claim is “directed to” an “abstract idea” in any case, a court must “examine earlier cases in which a similar or parallel descriptive nature can be seen—what prior cases were about, and which way they were decided.”<sup>26</sup> As the Court noted, *Core Wireless* and *Trading Technologies* present particularly analogous claims to the representative claim of the Tab Patents and should have controlling weight here. Similarly, the Court’s conclusion regarding the Track-

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<sup>19</sup> *Id.*

<sup>20</sup> *Id.* at 21–22.

<sup>21</sup> *Id.* at 22.

<sup>22</sup> *Id.* at 23.

<sup>23</sup> *Id.*

<sup>24</sup> *Id.* at 24.

<sup>25</sup> See *Amdocs (Isr.) Ltd. v. Openet Telecom, Inc.*, 841 F.3d 1288, 1294 (Fed. Cir. 2016).

<sup>26</sup> *Id.*; see also *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1334 (Fed. Cir. 2016).

changes Patent's claims find strong support in *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat'l Ass'n.*<sup>27</sup>

But on further inspection, the Court's broad rationale raises several questions. First, the Court expressly held that none of the asserted claims of the Tab Patents are directed to an abstract idea under *Alice* step one, except claim 1 of the '551 patent. This means that claim 3 of the '551 patent, which depends from claim 1, is not directed to an abstract idea under *Alice* step one. But claim 3 merely adds the step of "associating the plurality of cell matrices with a notebook identifier, whereby information stored in a first plurality of cell matrices may be referenced from a second plurality of cell matrices." The Court distinguished claim 1 from the representative claim because claim 1 generically recites associating cell matrices with page identifiers, and does not recite "the specific implementation of a notebook tab interface" that amounts to the "improvement in electronic spreadsheet functionality" that rendered the representative claim eligible.<sup>28</sup> But neither does claim 3. Claim 3 also generically recites associating cell matrices with an identifier, and does not recite any specific implementation of the tab interface. Indeed, claim 3 requires only that information in one sheet be *capable of being referenced* by another sheet, and does not require any user *interface* at all. If the Court's rationale for holding claim 1 ineligible is sound, then the Court's conclusion that claim 3 is eligible does not follow.

The Court's conclusion that claim 6 of the '551 patent is eligible does not follow for similar reasons. Again, the Court found fatal to the eligibility of claim 1 of the '551 patent the fact that it does not recite a specific implementation of the tab interface that improves spreadsheet functionality. But claim 6 arguably does not recite a specific implementation either. Claim 6 of the '551 patent is strictly broader than the representative claim of the Tab Patents, leaving out the steps of receiving a user selection of a tab while displaying a first sheet and displaying a second sheet in response to that user selection. So the only differences between claims 1 and 6 of the '551 patent are generic steps for displaying the first sheet and the tabs and receiving user input. There are no limitations that speak to how the tab interface operates in response to that user input—in fact, the user input is simply entering a formula into a second sheet. So, unlike the representative claim, claim 6 does not specifically claim the implementa-

<sup>27</sup> 776 F.3d 1343 (Fed. Cir. 2014). *See id.* at 1347–48.

<sup>28</sup> *Data Engine Techs.*, slip op. at 21–22.

tion that improves the spreadsheet interface—namely, the “highly intuitive, user-friendly interface with familiar notebook tabs *for navigating the three-dimensional worksheet* environment.”<sup>29</sup>

Finally, the opinion again raises questions about the overlap between the eligibility analysis under § 101 and the patentability analysis under §§ 102 and 103. This overlap is not a problem *per se*,<sup>30</sup> but the Federal Circuit has repeatedly struck down arguments seemingly conflating the two modes of analyses.<sup>31</sup> Here, the Court purported to distinguish the question of abstraction from the question of whether the use of tabs to organize information was well known.<sup>32</sup> On its face, this appears to be in line with the Court’s previous opinions. But at the same time, the Court spilled much ink expounding on how the commercial embodiment of the claimed invention “revolutionized three-dimensional electronic spreadsheets.”<sup>33</sup> The Court supported its conclusion that the representative claim of the Tab Patents is not directed to an abstract idea by referencing the industry praise for the commercial embodiment.<sup>34</sup> And of course, commercial success of a product embodying the claimed invention is an objective indicium of non-obviousness.<sup>35</sup> The Court further departed from its precedents by conducting this pseudo-obviousness in-

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<sup>29</sup> *Id.* at 13 (emphasis added).

<sup>30</sup> *See, e.g.*, *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 90 (2012) (“We recognize that, in evaluating the significance of additional steps, the § 101 patent eligibility inquiry and, say, the § 102 novelty inquiry might sometimes overlap.”).

<sup>31</sup> *See, e.g.*, *Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1151 (Fed. Cir. 2016) (“[A] claim for a new abstract idea is still an abstract idea. The search for a § 101 inventive concept is thus distinct from demonstrating § 102 novelty.”); *Intellectual Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1315 (Fed. Cir. 2016) (“[T]he jury’s general finding that Symantec did not prove by clear and convincing evidence that three particular prior art references do not disclose all the limitations of or render obvious the asserted claims does not resolve the question of whether the claims embody an inventive concept at the second step of *Mayo/Alice*.”).

<sup>32</sup> *Data Engine Techs.*, slip op. at 20 (“The eligibility question is not whether anyone has ever used tabs to organize information. That question is reserved for §§ 102 and 103. The question of abstraction is whether the claim is “directed to” the abstract idea itself.”).

<sup>33</sup> *Id.* at 5–6.

<sup>34</sup> *Id.* at 13–14.

<sup>35</sup> *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966). Indeed, the Court’s argument runs counter to its admonition that “[c]ommercial success is not necessarily a proxy for an improvement in a technology nor does it necessarily indicate that claims were drawn to patent eligible subject matter.” *Versata Dev. Grp., Inc. v. SAP Am., Inc.*, 793 F.3d 1306, 1335 (Fed. Cir. 2015).

quiry at the first step of *Alice*. Even the holding of *Berkheimer v. HP Inc.*,<sup>36</sup> where the Court expressly approved of considering underlying factual questions as part of the § 101 inquiry, was in the context of the second step of *Alice*.<sup>37</sup>

The Court's resort to this industry praise for the Quattro Pro in the first step of *Alice* seems to turn the patentability analysis on its head. The Supreme Court has stated that "[t]he obligation to determine what type of discovery is sought to be patented must precede the determination of whether that discovery is, in fact, new or obvious."<sup>38</sup> On the other hand, Judge Plager recently suggested that a court may, "in an appropriate case," defer addressing an abstract ideas defense "until first having the issues in §§ 102, 103, and 112 addressed."<sup>39</sup> By importing secondary considerations of commercial success into step one of the *Alice* inquiry, and thus front-loading significant factual inquiries that bear on obviousness, the Court's decision may incentivize some district courts to adopt the procedure contemplated by Judge Plager. In any case, the Court's opinion in *Data Engine Technologies* raises more questions than it answers in this uncertain area of the law. ■

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<sup>36</sup> 881 F.3d 1360 (Fed. Cir. 2018).

<sup>37</sup> *Id.* at 1369–70.

<sup>38</sup> *Parker v. Flook*, 437 U.S. 584, 593 (1978).

<sup>39</sup> *Interval Licensing LLC v. AOL, Inc.*, 896 F.3d 1335, 1355 (Fed. Cir. 2018) (Plager, J., concurring-in-part and dissenting-in-part). Judge Plager concurred in the majority's patent eligibility analysis in light of the Court's governing precedents, "even though the state of the law is such as to give little confidence that the outcome is necessarily correct." *Id.* at 1348 (Plager, J., concurring-in-part and dissenting-in-part). But he dissented from the Court's "continued application of this incoherent body of doctrine." *Id.*