

Filed on behalf of: R2 Solutions LLC

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

CLOUDERA, INC.,

Petitioner,

v.

R2 SOLUTIONS LLC,

Patent Owner

Case IPR2024-00303

U.S. Patent 8,190,610

PATENT OWNER'S PRELIMINARY SUR-REPLY

The Board should deny institution under 35 U.S.C. § 325(d) because the Office already considered near identical art and arguments, and Petitioner failed to demonstrate that the Office erred. Furthermore, it was apparent, not just “reasonably foreseeable,” that Patent Owner would raise the § 325(d) argument in response, but Petitioner made a strategic decision not to address it at the outset. *See Google LLC v. Valtrus Innovations Limited*, IPR2022-01197, Paper 12 at 6 (PTAB Mar. 29, 2023); *see also* Resp. at 32-34. Such gamesmanship flouts the Board’s precedential *Advanced Bionics* opinion and should not be rewarded.

I. The Art and Arguments Relied Upon in the Petition are Substantially Similar to Those Before the Office During Prosecution.

Petitioner claims that Pike discloses status tracking and “application-specific” operators and Dean does not. This is wrong. Regarding status tracking, the only difference between the disclosures is that Pike provides a picture where Dean uses words. Indeed, the actual substance regarding “Process and Task Status Tracking” in the two disclosures is nearly identical (i.e., that the “master” knows which input files are handled by which tasks and in which output files processed data is stored). *Compare, e.g.,* Dean (Ex. 1009) at 4 (“For each map task and reduce task, [the master] stores the state (*idle*, *in-progress*, or *completed*), and the identity of the worker machine ... [t]he master stores the locations and sizes of the *R* intermediate file regions”), 5 (“When a map task completes, the worker sends a message to the master and includes the names of the *R* temporary files in the message ... [the

master] records the names of *R* files in a master data structure.”), 2 (“a *mapreduce specification* object with the names of the input and output files” is passed to the MapReduce function) *with* Ex. 1002 at Fig. 6, 7A. And Petitioner is flat wrong that Dean does not disclose “application-specific” operators—Dean dedicates an entire page to explaining the different applications for which MapReduce can be used and how the unique “operators” (mappers and reducers) specifically work for each application. *See, e.g.*, Ex. 1009 at 2-3 (describing different applications and what the mappers and reducers do in each application).

Cruanes and Chowdhuri are as similar as Dean and Pike. Cruanes teaches scanning in data from different tables in parallel and feeding scanned portions to hash join functions. *See, e.g.*, Ex. 2008, ¶¶ 55-57 (discussing slaves on different nodes scanning in portions of tables), ¶ 14 (discussing how the “probe phase” processes the scanned-in data to generate a “hash table” and join on the hashes). Chowdhuri teaches *the exact same thing* (*see, e.g.*, Chowdhuri, ¶ 130), and Petitioner relies on Chowdhuri for precisely this disclosure.

Furthermore, the arguments in the Petition are substantially similar to those already presented to the Office. During prosecution, the examiner combined a typical MapReduce implementation (U.S. Pat. App. Pub. No. 2007/0038659 (“Datar”)) with Burroughs (Ex. 2007, which teaches data of different schemas) and alleged that the combination rendered the claims invalid. *See* Ex. 1004 at 154-162;

see also Datar at ¶ 33 (“This implementation uses the MapReduce programming model and technology....”). Petitioner makes this argument now, but with Pike and Chowdhuri substituted for Datar and Burroughs, respectively. The examiner also alleged that Cruanes, by itself, rendered the claims invalid because it teaches joining tables on a common key via distributed map/reduce operations. *See, e.g.*, Ex. 1004 at 76-86. Petitioner argues here that Pike teaches receiving diverse data into a MapReduce architecture and joining such data over a distributed system. These arguments are substantially similar. And the fact that Patent Owner does not address MacLeod is irrelevant for the reasons set forth in the Response. *See* Resp. at n. 12.

II. The Office Committed No Error.

At bottom, Petitioner argues the Office erred by not asserting the Petition’s argument (again, Dean plus Cruanes is equivalent to Pike plus Chowdhuri). Not so. As set forth in the Response, there is no workable combination of Pike/Chowdhuri, just as there is no workable combination of Dean/Cruanes. *See, e.g.*, Resp. at 58-60. Indeed, the examiner likely considered this combination and chose not to assert it—the examiner first asserted the combination of Datar (e.g., MapReduce) with Burroughs, and only later asserted Cruanes by itself after an RCE. *See, e.g.*, Ex. 1004 at 151-162, 111-122. In other words, the examiner knew of MapReduce and saw no coherent combination with Cruanes. This emphasizes that there is also no coherent combination of Pike/Chowdhuri.

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CERTIFICATE OF SERVICE

The undersigned certifies that the foregoing Patent Owner's Preliminary Sur-Reply was served on April 24, 2024, to Lead and Back-up Counsel for Petitioner at the service addresses provided in Petitioner's Mandatory Notices:

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