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- (71) Applicant: **YUGABYTEDB, INC.** [US/US]; 771 Vaqueros Ave, Sunnyvale, California 94085 (US).
- (72) Inventors: **THALLAM KODANDARAMAIIH, Raghavendra**; c/o Yugabytedb, Inc., 771 Vaqueros Ave, Sunnyvale, California 94085 (US). **MUTHUKKARUPAN, Kannan**; c/o Yugabytedb, Inc., 771 Vaqueros Ave,

Sunnyvale, California 94085 (US). **MARTSINCHYK, Andrei**; c/o Yugabytedb, Inc., 771 Vaqueros Ave, Sunnyvale, California 94085 (US). **YUSUPOV, Timur**; c/o Yugabytedb, Inc., 771 Vaqueros Ave, Sunnyvale, California 94085 (US).

- (74) Agent: **THAPPETA, Narendra**; Iphorizons PLLC, 13495 Briar Court, Saratoga, California 95070 (US).

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- (54) Title: PARALLEL PROCESSING IN DATABASE SYSTEMS STORING A TABLE AS KEY VALUE PAIRS IN MULTIPLE INDEPENDENT SORTED STRUCTURES WITH OVERLAPPING KEYS

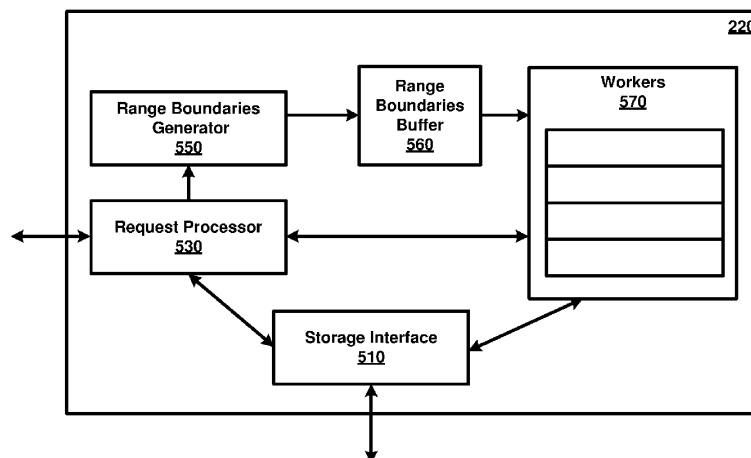


FIG. 5A

(57) Abstract: According to an aspect, a database system stores data of a table as key-value pairs in independent sorted structures (ISS), each ISS storing corresponding key-value pairs according to a sort order of the keys. Each ISS consists of data blocks, each data block being associated with a corresponding data block index key that identifies the keys present in the data block. Upon identifying a start scan key, an end scan key, and an interleave size, the database system determines a next key range specifying a chunk of data approximately equal to the interleave size, with the next key range being contained in a super sequence of data block index keys corresponding to the multiple data blocks between the start scan key and the end scan key in the sort order. The database system sends the next key range to workers for processing, and performs the determining and the sending until the super sequence of data block index keys are identified as having been sent for processing.

[Continued on next page]

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