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Kamvar et al.

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- (54) **ADAPTIVE COMPUTATION OF RANKING** 6,560,600 B1 * 5/2003 Broder 707/7
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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

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- (60) Provisional application No. 60/458,921, filed on Mar. 28, 2003.

(51) **Int. Cl.**
G06F 17/30 (2006.01)

(52) **U.S. Cl.** 707/5; 3/7; 715/501.1

(58) **Field of Classification Search** 707/3,
707/100, 5, 101, 10; 706/15; 715/500
See application file for complete search history.

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(57) **ABSTRACT**

A system and method is disclosed in which a ranking function for a set of document rank values is iteratively solved with respect to a set of linked documents until a first stability condition is satisfied. After such condition is satisfied, some of the ranks will have converged. The ranking function is modified to take into account these converged ranks so as to reduce the ranking function's computation cost. The modified ranking function is then solved until a second stability condition is satisfied. After such condition is satisfied more of the ranks will have converged. The ranking function is again modified and process continues until complete.

31 Claims, 5 Drawing Sheets

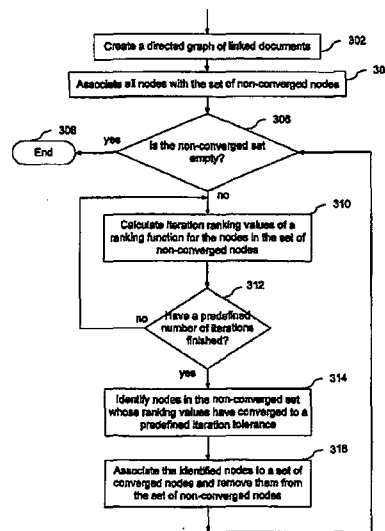


EXHIBIT 2104

Facebook, Inc. et al.

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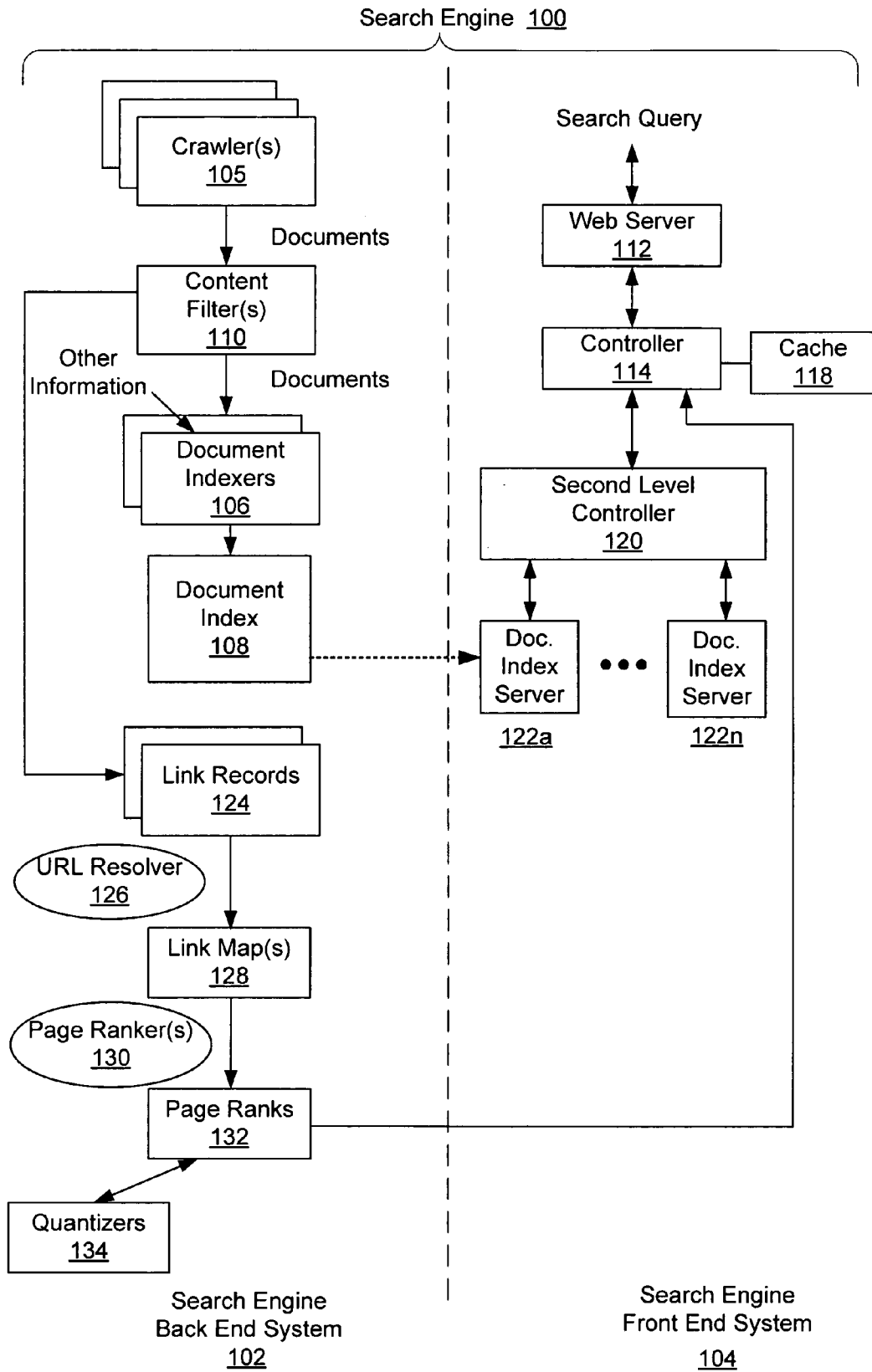


Fig. 1

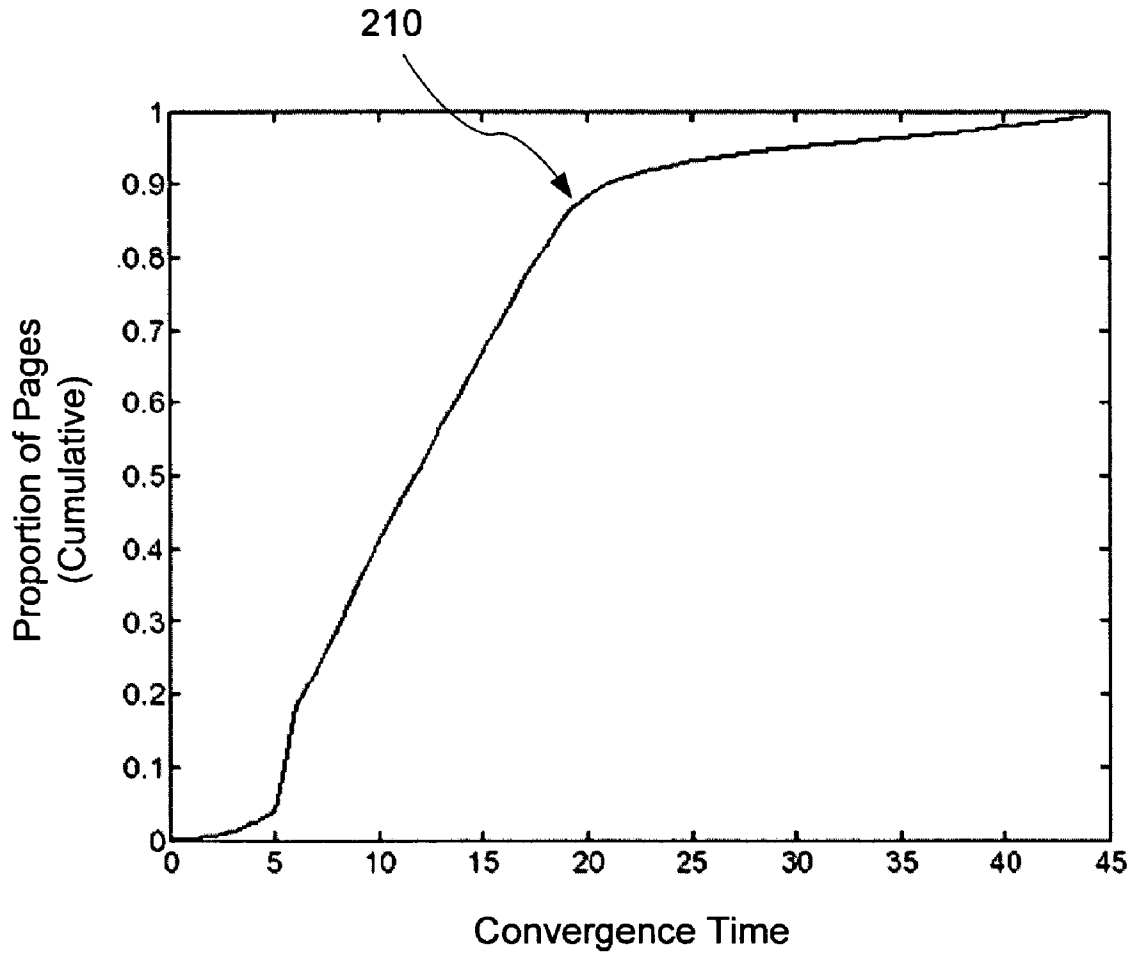


Fig. 2

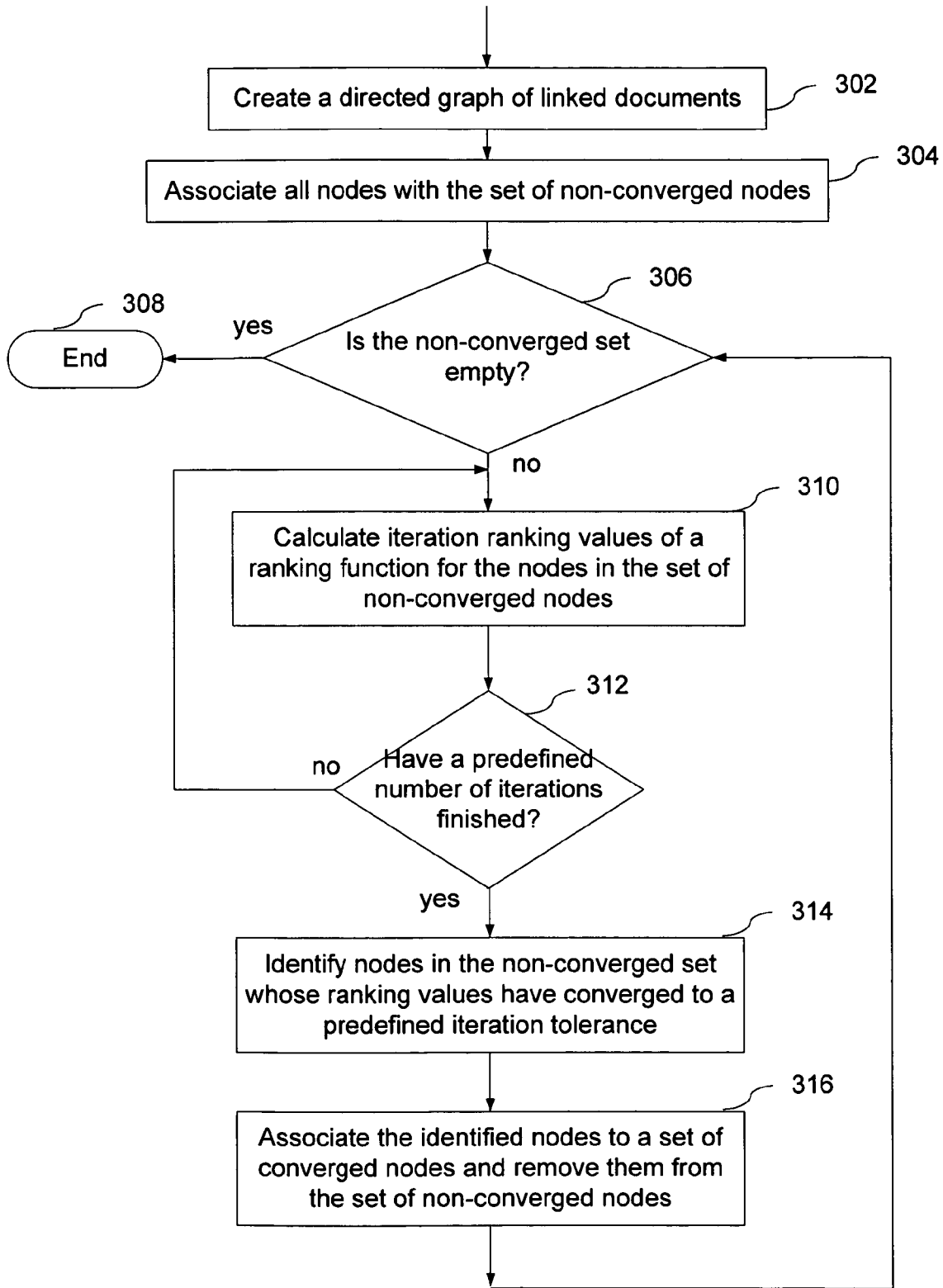


Fig. 3

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