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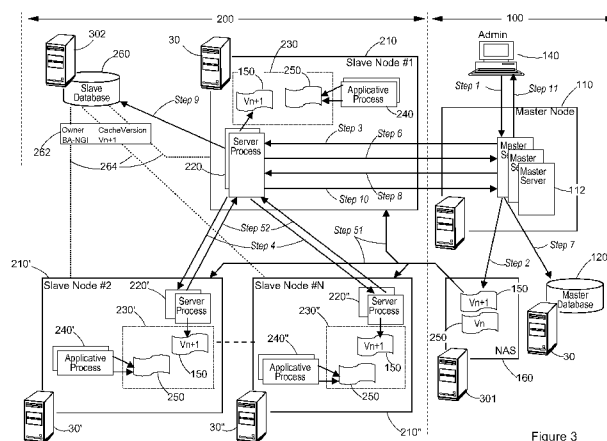
(54) Title: METHOD AND SYSTEM TO MAINTAIN STRONG CONSISTENCY OF DISTRIBUTED REPLICATED CON-
TENTS IN A CLIENT/SERVER SYSTEM

Figure 3

(57) Abstract: A method and a system for maintaining consistency of replicated files distributed over a plurality of independent pro-
cessing slave nodes (210, 210', 210'') part of an application tier of a multi-tier client/server data processing system are described. The
replicated files are distributed from a master node of a master tier. Upon reception of an update request (142) to update a master
database a new version of a replicated file is first generated and stored in a shared file system (160). Then, a notification of availabil-
ity of the new version is forwarded to a synchronizing slave node and, from there, broadcasted to all slave nodes (210, 210', 210'').
Each slave node preloads the new version (150) of the replicated file from the shared file system (160) and acknowledges successful
completion. Upon reception of all acknowledgments in the synchronizing slave node a notification of preloading achievement is
forwarded to the master server (112) which updates the master database thus committing the use of the new version by the data pro-
cessing system. The commitment is further forwarded to the synchronizing slave node which commits in turn the use of the new ver-
sion (150) of the replicated file in a slave database aimed at keeping track of all replicated file versions for all slave nodes (210, 210',
210''). Upon reception of a notification of commitment of all slave nodes (210, 210', 210''), the master server (112) acknowledges
completion of the update in response to the received update request (142).



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