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(71) Applicant: **FEATURESPACE LIMITED** [GB/GB]; 140
Cambridge Science Park, Milton Road, Cambridge Cam-
bridgeshire CB4 0GF (GB).

(72) Inventor: **COOPER, Simon**; c/o Featurespace Limited,
140 Cambridge Science Park, Milton Road, Cambridge
Cambridgeshire CB4 0GF (GB).

(74) Agent: **MISHCON DE REYA LLP** et al.; Africa House,
70 Kingsway, London, WC2B 6AH (GB).

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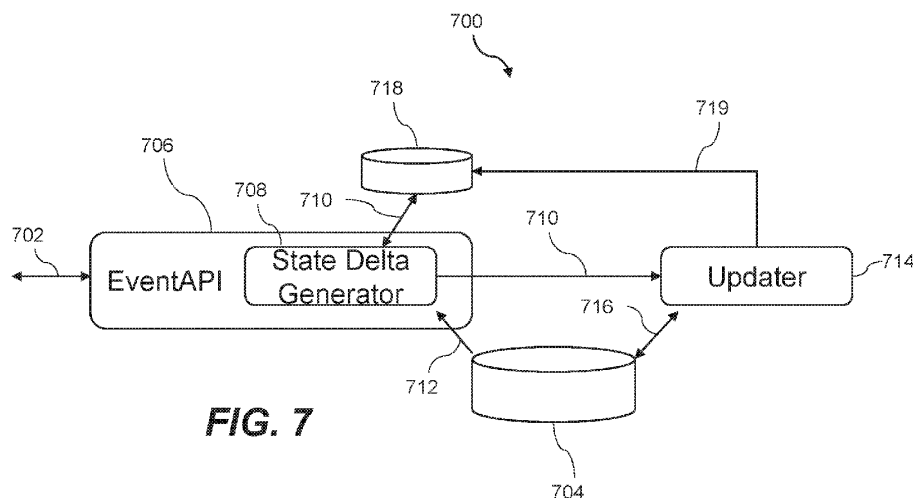


FIG. 7

(57) Abstract: A machine learning system (700) for processing incoming event data (702) associated with a transaction. A state delta generator (708) retrieves a version of the state data (712) from a database (704) and receives incoming event data (702). The generator (708) processes the event data (702) and the state data (712) using a model to generate a state delta (710) comprising a set of pending updates to the state data which is stored in a queue. An updater (714) retrieves the event state deltas (710) from the queue and the state data (716) from the database (704). The updater (714) applies the pending updates from each state delta (710) to generate updated state data (716) used to update the database (704). A cache (718) stores a copy of each of the state deltas (710), where the copies of the state deltas are stored in the cache together with a value indicative of the version of the state data used to generate the state delta.

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