

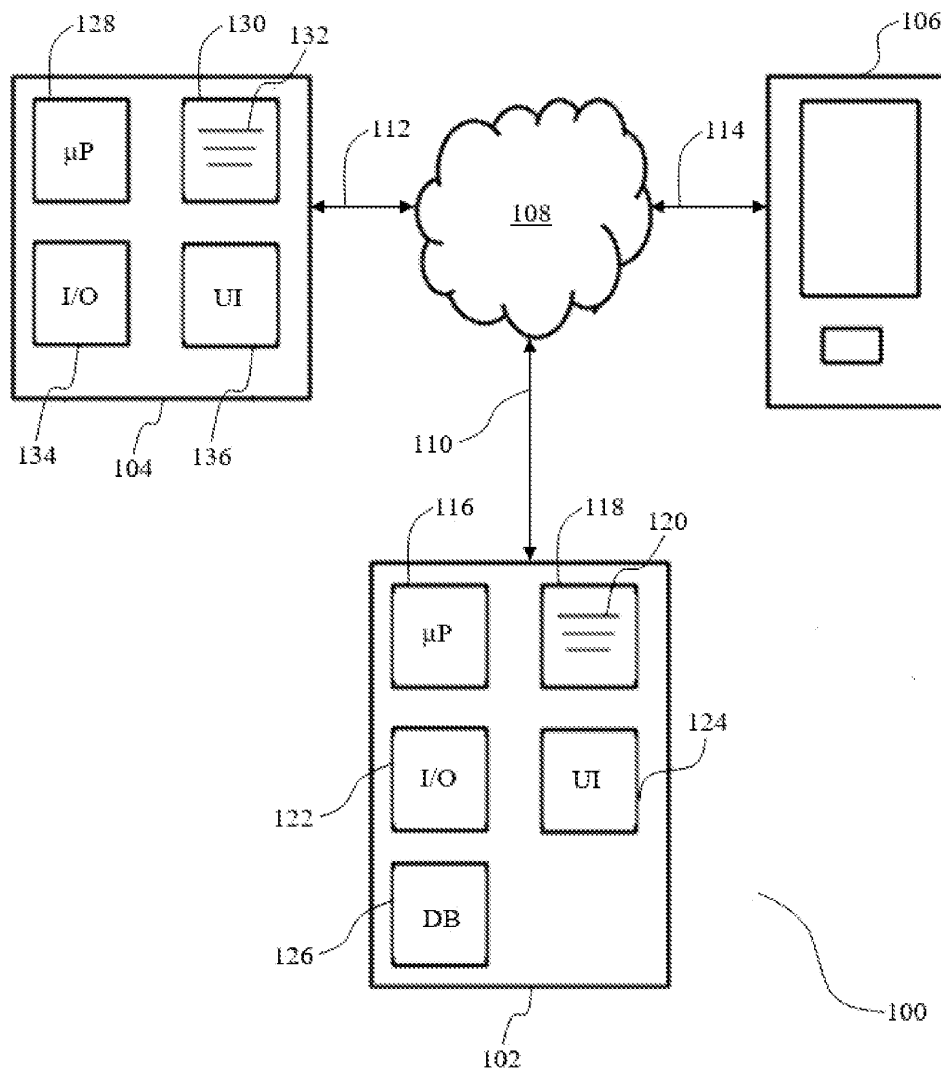


FIG. 1

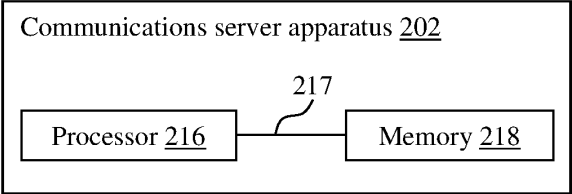


FIG. 2A

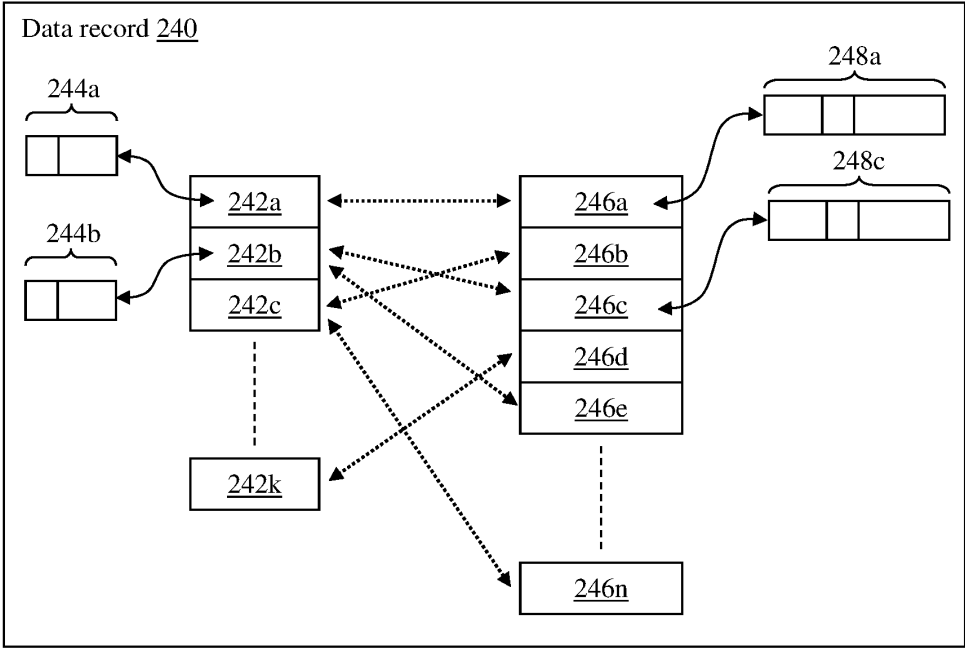


FIG. 2B

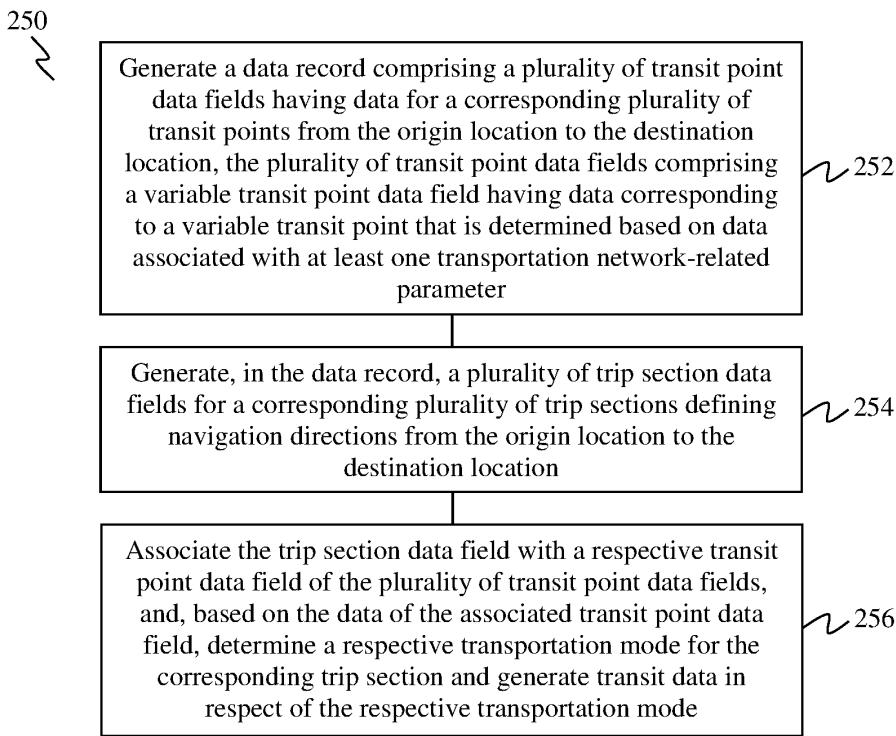


FIG. 2C

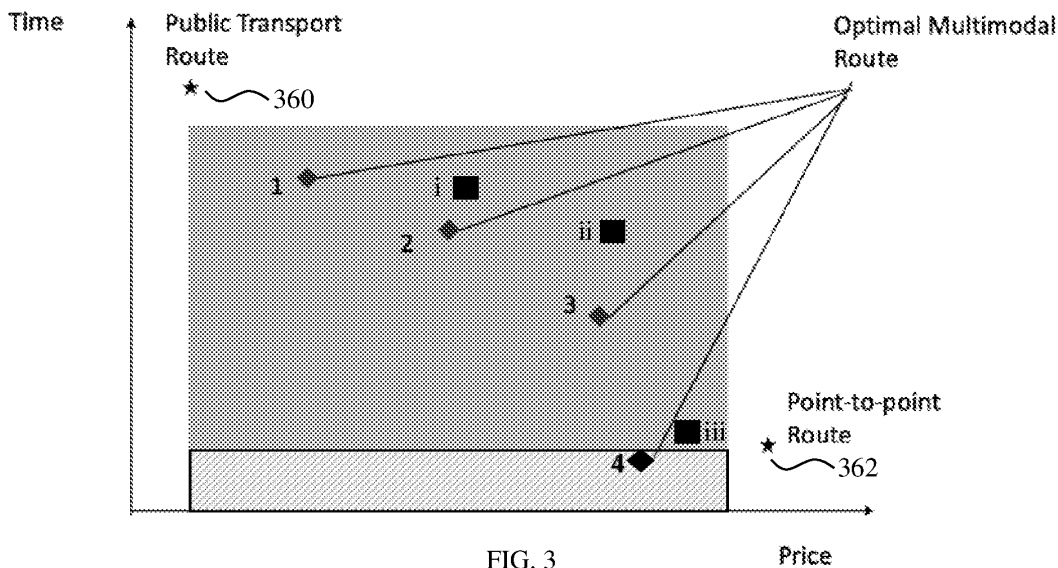


FIG. 3

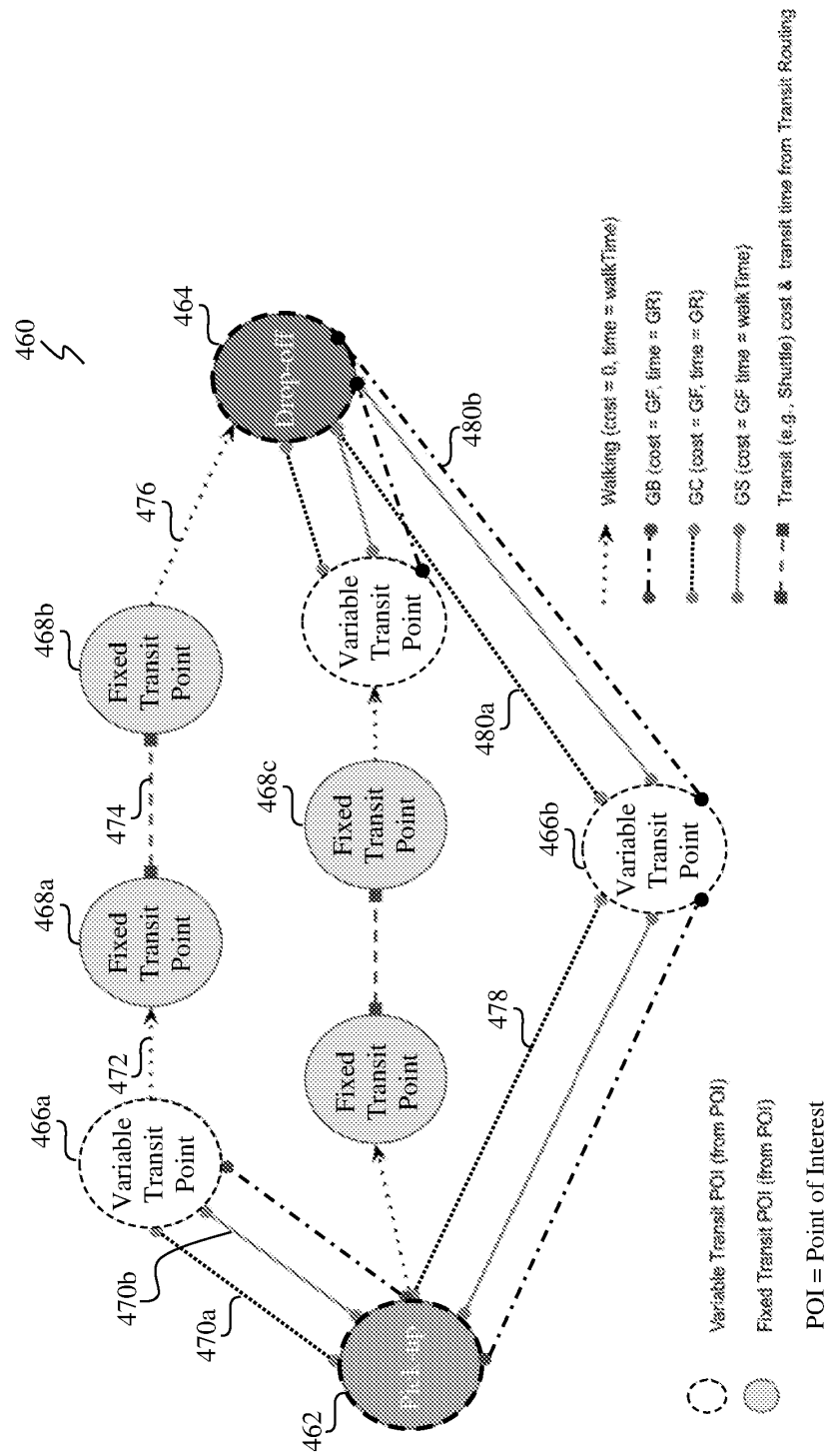


FIG. 4

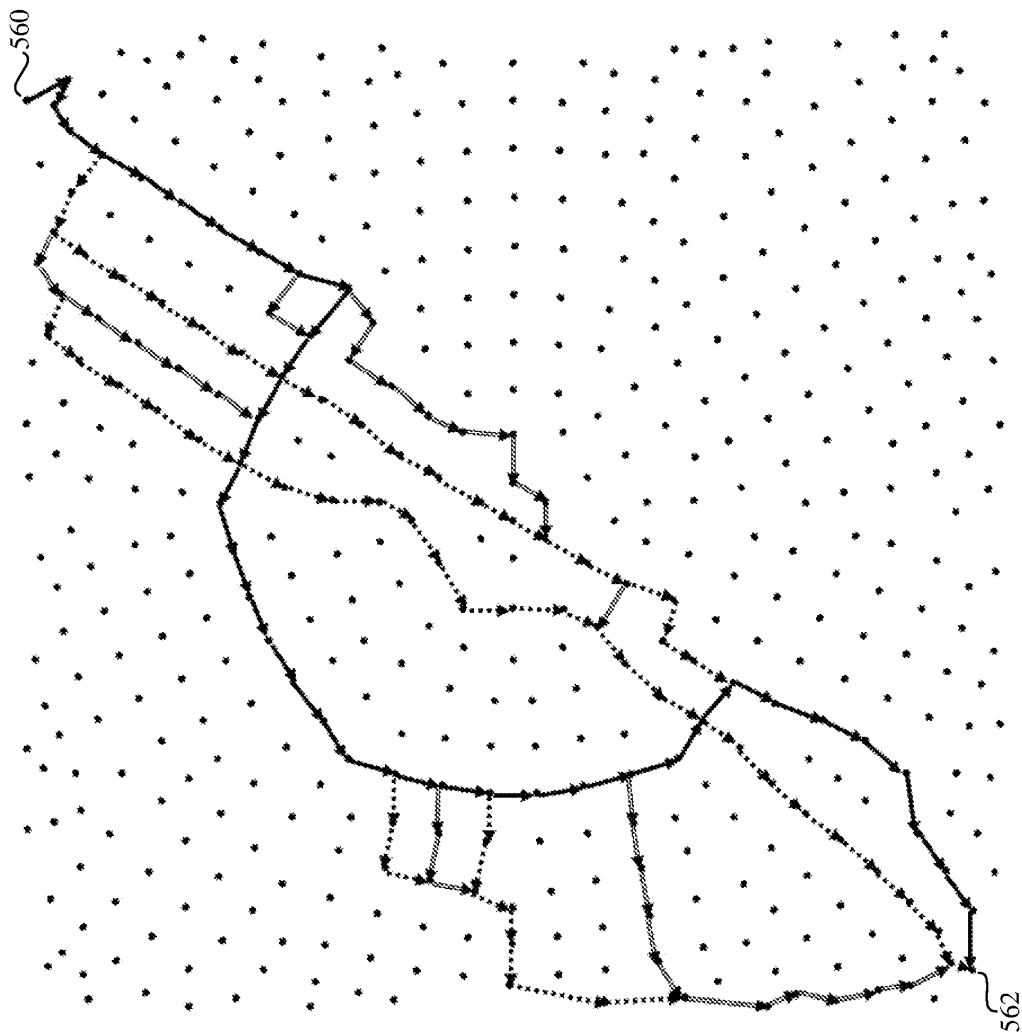


FIG. 5A

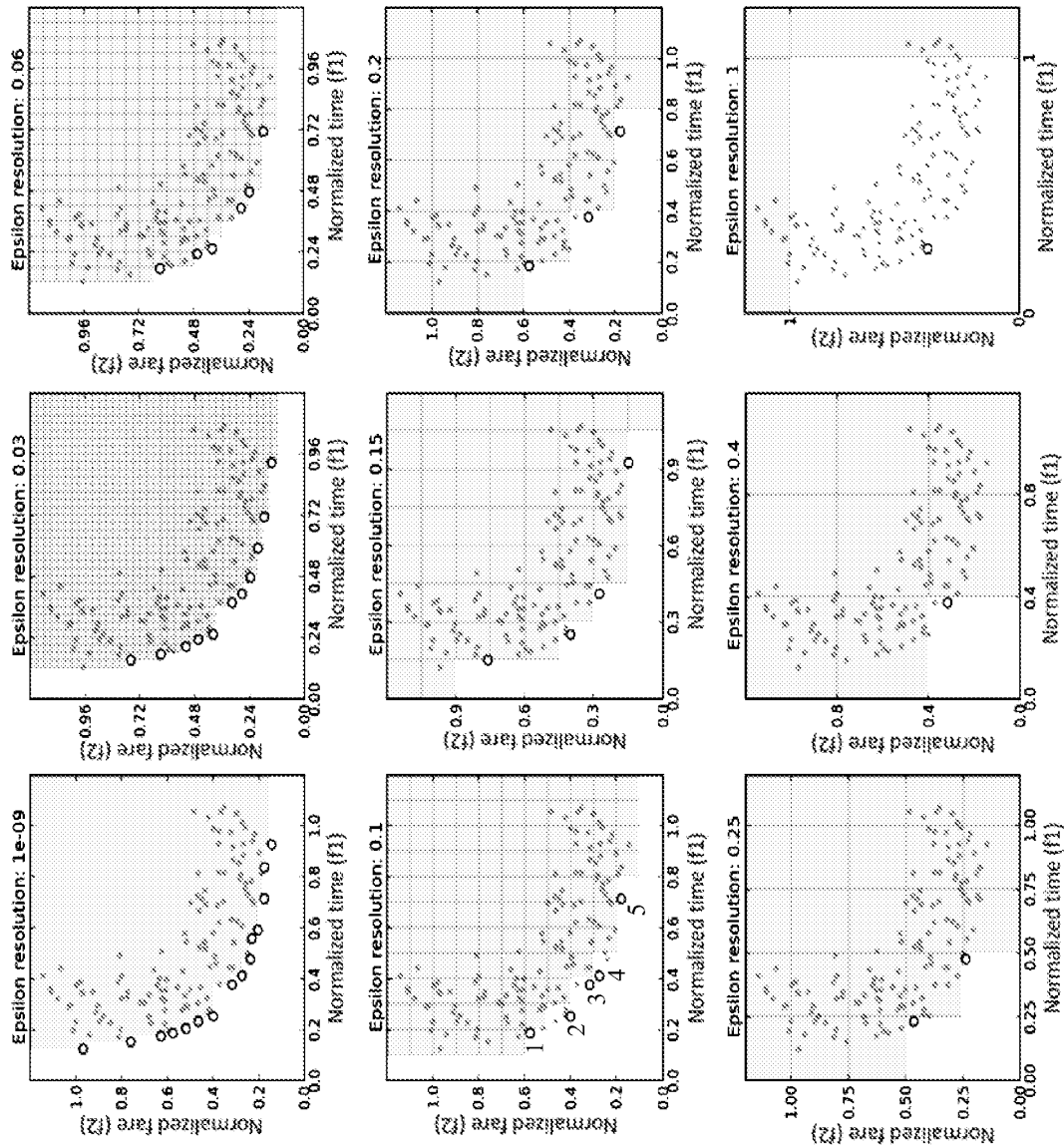


FIG. 5B

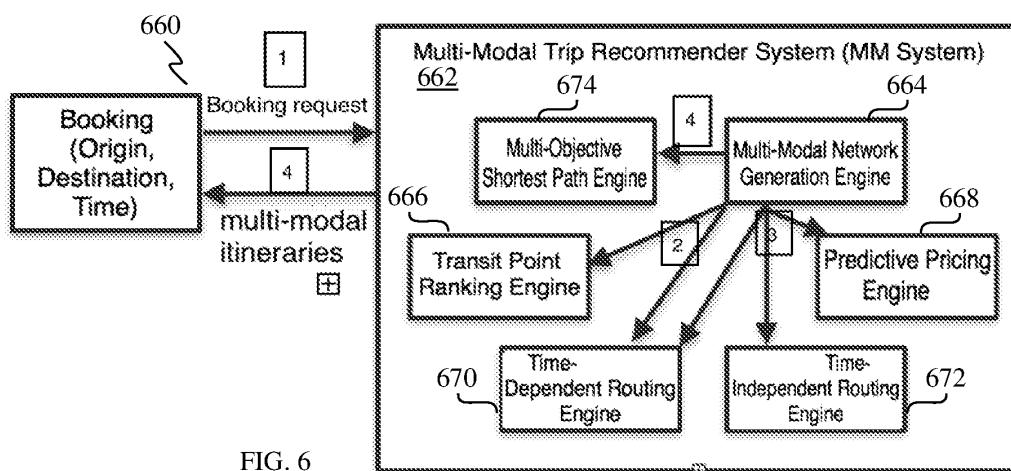


FIG. 6

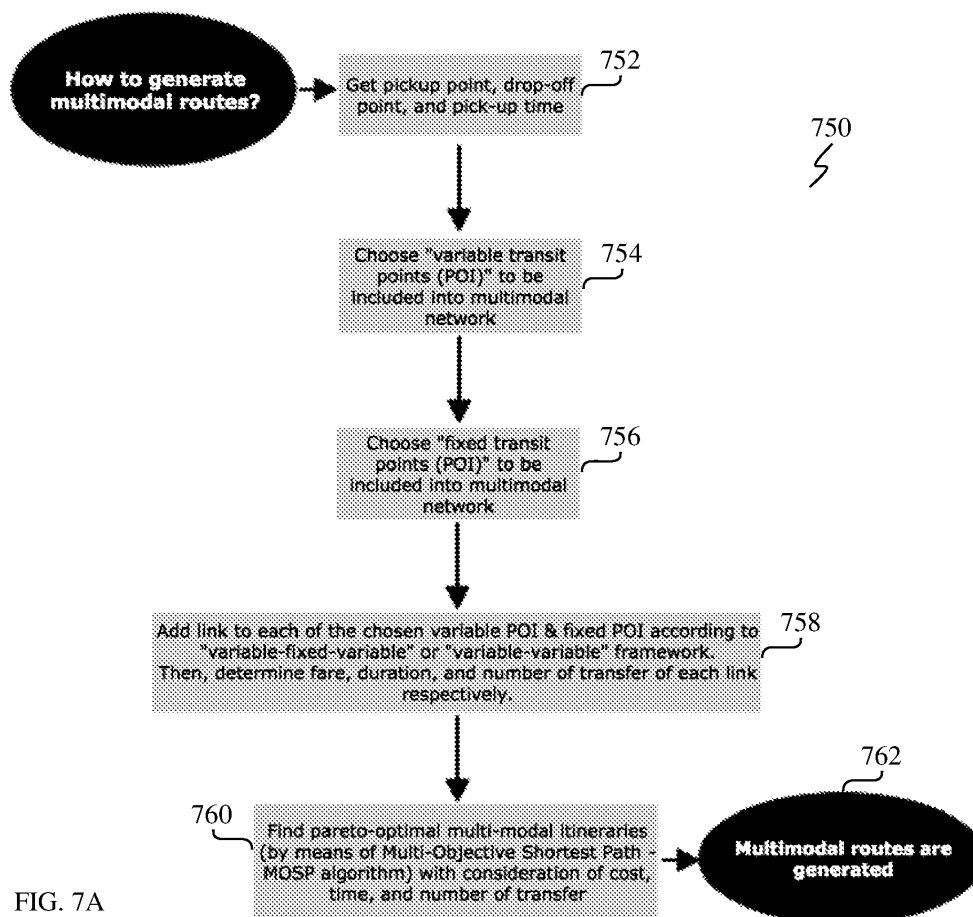
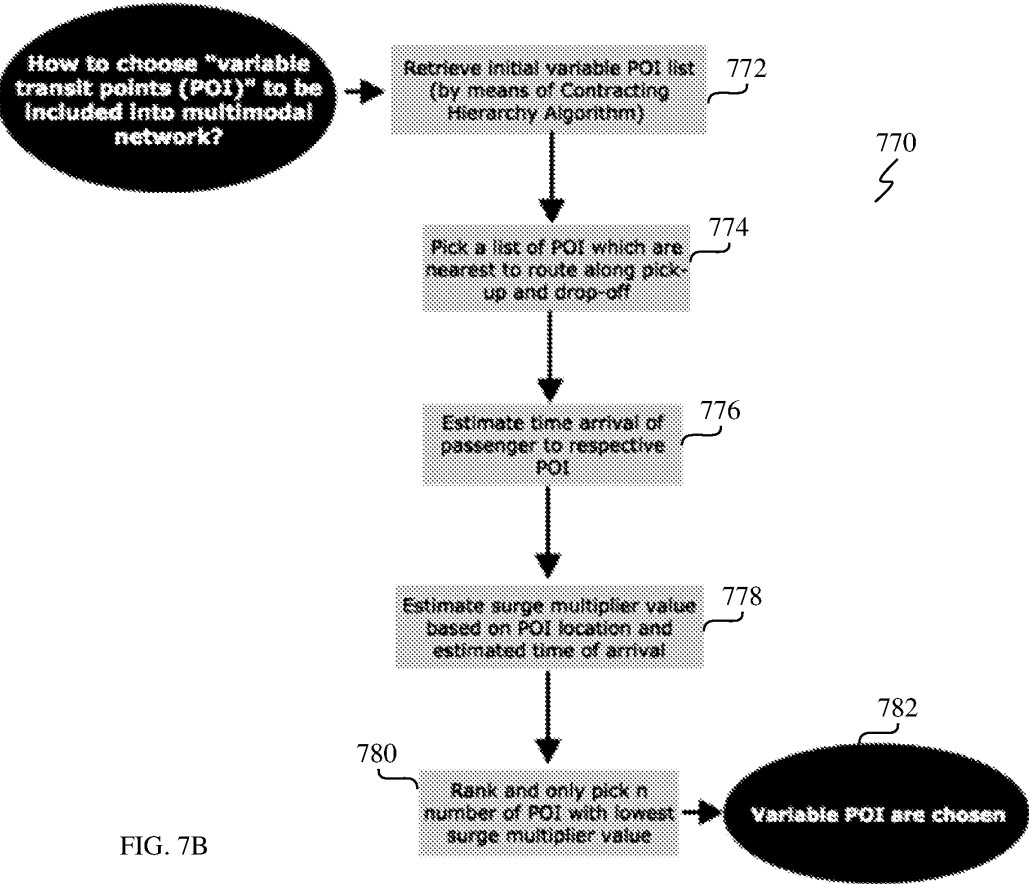
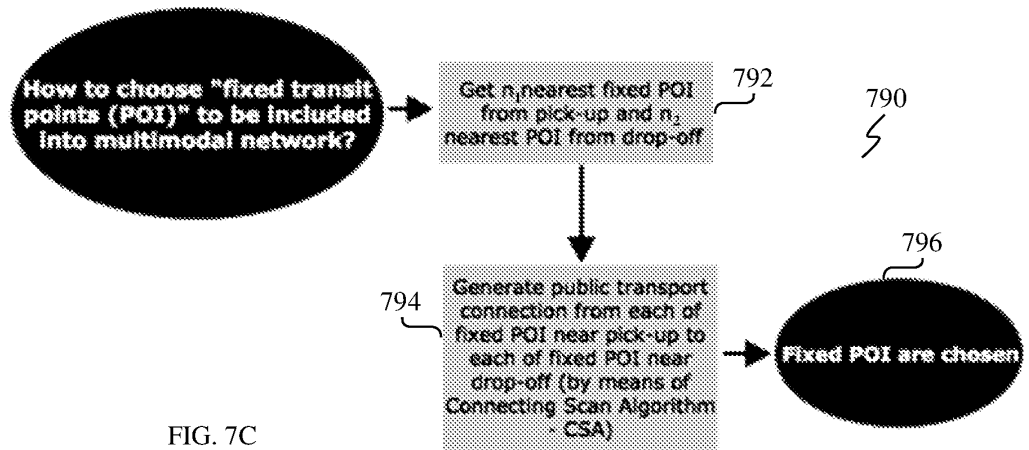


FIG. 7A



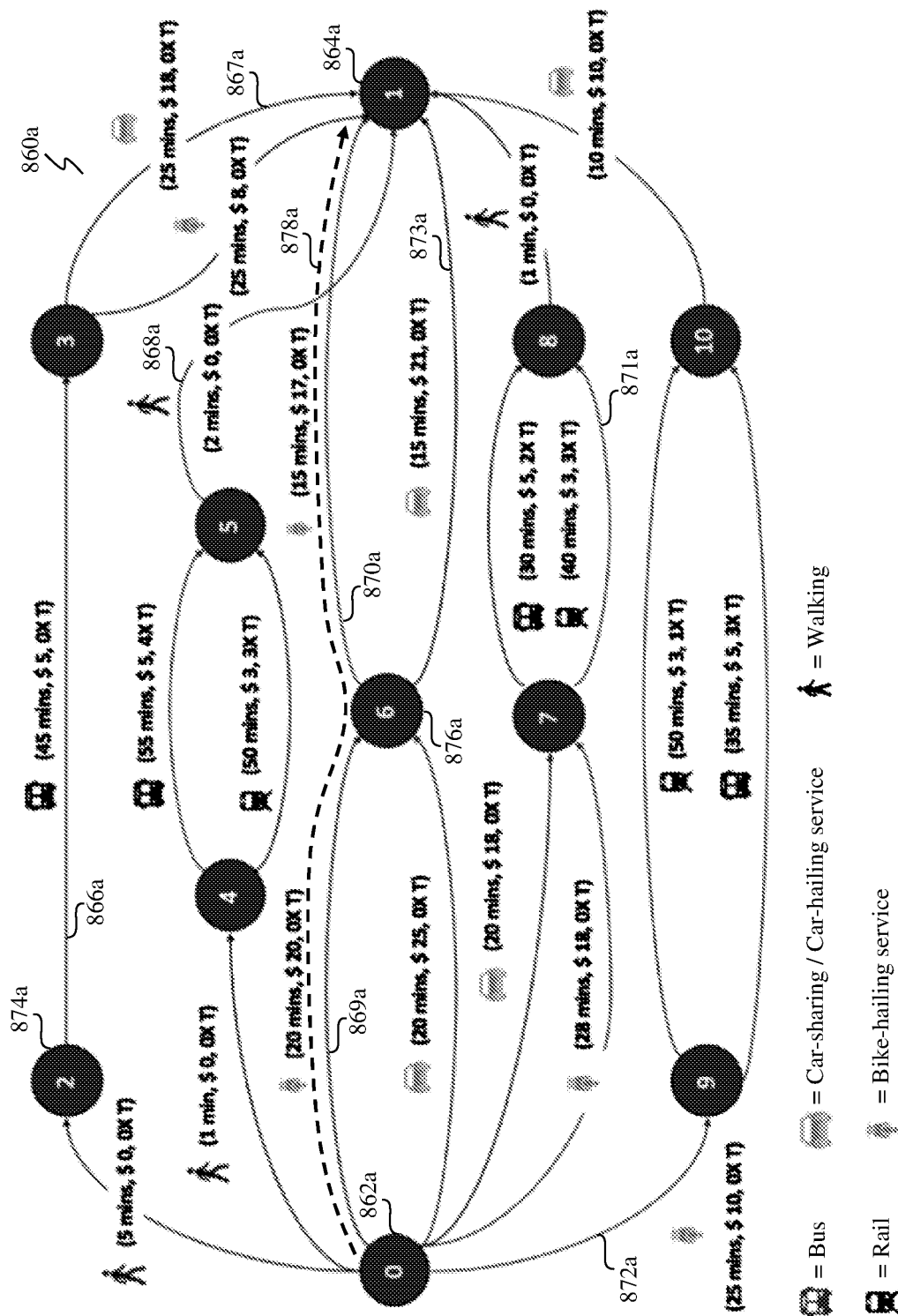


FIG. 8A

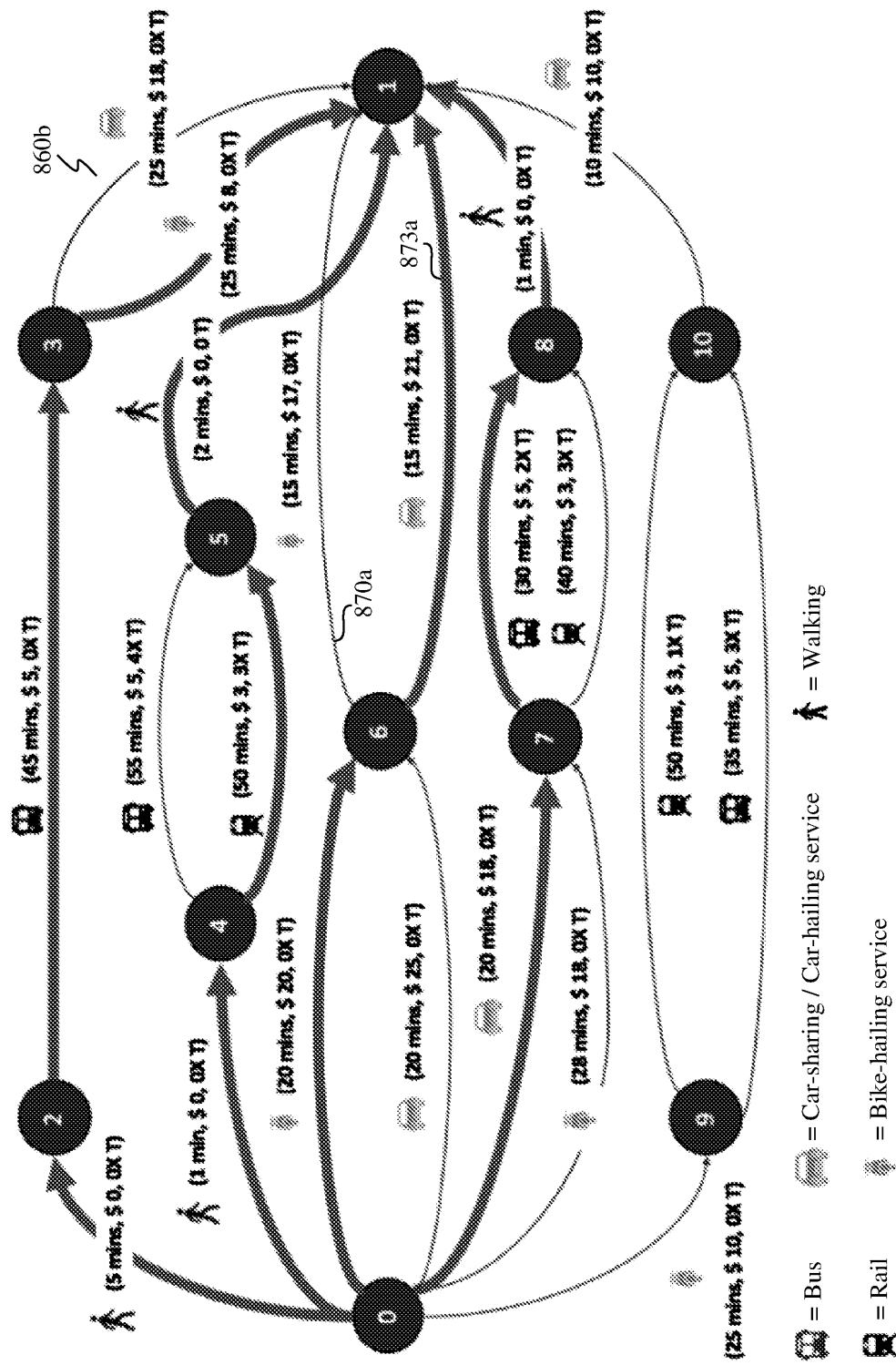


FIG. 8B

Name	Type	Purpose
Road Network	Directed Graph	graph where nodes are streets (or intersections) and edges are intersections (or streets) connecting the nodes.
Transit Network	Directed Graph	graph where nodes are designated stops and edges are connections.
Multi-Modal Network	Directed Multi-Edge Graph	graph to encode possible multi-modal itineraries from O to D
Real-Time Connections	Data Stream	a stream of connections between designated transit stops sorted by their departure times.
Historical Trips	Database	For metric forecasting and transit points ranking.
Itinerary Comparator	Priority Queue	To sort multi-modal itineraries with respect to a specific criterion.
Non-Dominated Archive	Pareto Approximation Set	To maintain the set of optimal multi-modal itineraries based on the Multi-Modal Network

FIG. 9

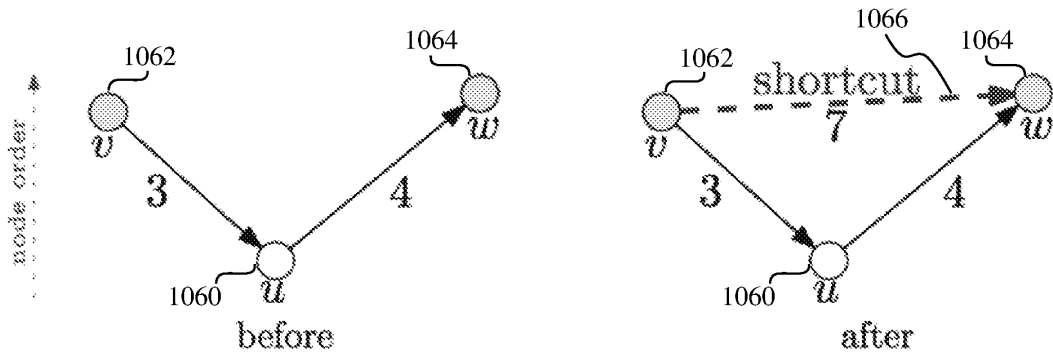


FIG. 10A



FIG. 10B