



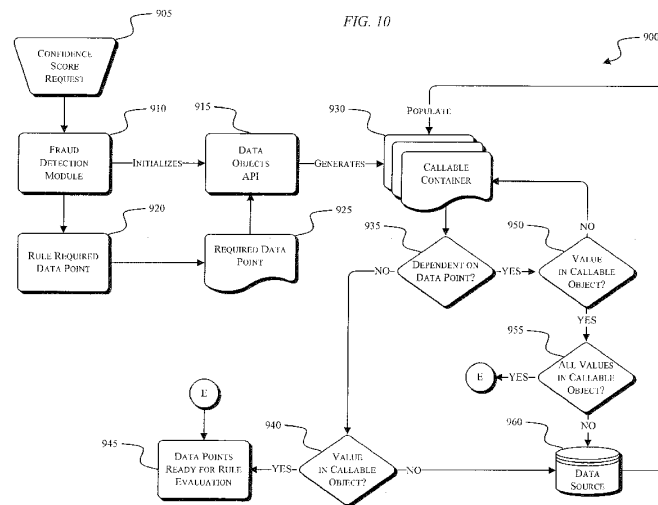
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(54) Title: OPTIMIZED EXECUTION OF FRAUD DETECTION RULES



(57) Abstract: Systems, methods, devices, and computer readable media related to fraud detection. Fraud detection is achieved using a flexible scripting language and syntax that simplifies the generation of fraud detection rules. The rules are structured as conditional IF-THEN statements that include data objects referred to as Anchors and Add-Ons. The Anchors and Add-Ons used to generate the rules also correspond to a distinct data path for the retrieval data from any of a variety of data sources. The retrieval of data from the various data sources is optimized based on data dependencies within the rules. By knowing the data dependencies of each rule and utilizing parallelization of rule execution, the retrieval of data from the data sources is achieved efficiently so the rules can be executed quickly.

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