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(54) Title of the Invention: **Anomalous event prediction using contrastive learning**
Abstract Title: **Anomalous event prediction using contrastive learning**

(57) Various techniques can include systems and methods for using contrastive learning to predict anomalous events in data processing systems. The method can include accessing an unstructured data file and contextual data associated with the unstructured data file. The method can also include generating an event-data input element for the unstructured data file. The event-data input element can include a set of feature vectors. The set of feature vectors can include a first feature vector generated by using a first encoder to process the unstructured file and a second feature vector generated by using a second encoder to process the contextual data. The method can also include generating a classification result of the unstructured data file by using a machine-learning model to process the event-data input element, in which the classification result includes a prediction of whether the particular event corresponds to an anomalous event.

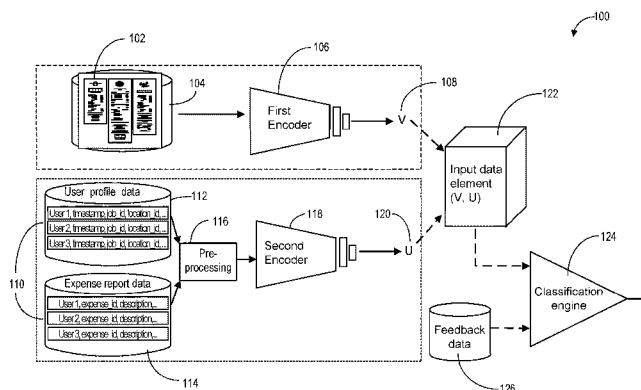


FIG. 1

This international application has entered the national phase early