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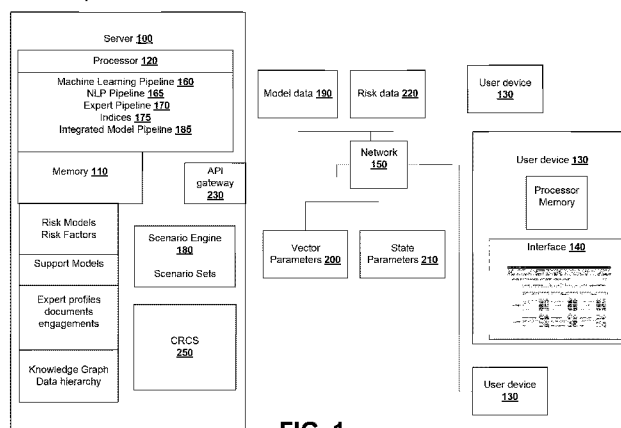
(71) Applicant(s):  
**Riskthinking.AI Inc.**  
**398 Markham Street, Toronto, Ontario, M6G 2K9,**  
**Canada**

(72) Inventor(s):  
**Ron Samuel Dembo**  
**John Howard Andrew Wiebe**

(74) Agent and/or Address for Service:  
**Potter Clarkson**  
**Chapel Quarter, Mount Street, Nottingham, NG1 6HQ,**  
**United Kingdom**

(54) Title of the Invention: **Systems and methods with classification standard for computer models to measure and manage radical risk using machine learning and scenario generation**  
 Abstract Title: **Systems and methods with classification standard for computer models to measure and manage radical risk using machine learning and scenario generation**

(57) Embodiments relate to computer systems and methods for computer models and scenario generation. The system involves generating integrated climate risk data using a Climate Risk Classification Standard hierarchy that maps climate data and multiple risk factors to geographic space and time. A computer model involves risk factors modeled as graphs of nodes, each node corresponding to a risk factor and connected by edges or links. The nodes of the graph create scenario paths for the model. A hardware processor populates the graphs of nodes using a machine learning, natural language processing and expert judgement systems. The system automatically generates multifactor scenario sets using the scenario paths for the climate model to compute the likelihood of different scenario paths for the computer model.



**FIG. 1**