



(12) **United States Patent**  
**Geislinger et al.**

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(54) **SYSTEM AND METHOD FOR DETERMINING LIFT HEIGHTS OF A STOCKPILE**

(58) **Field of Classification Search**  
CPC ..... G01C 21/3811; G01C 21/3826  
See application file for complete search history.

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(57) **ABSTRACT**

The method may comprise receiving historical data (e.g., mineralogy data, irrigation data, raffinate data, heat data, lift height data, geographic data on ore placement and/or blower data); training a predictive model using the historical data to create a trained predictive model; adding future assumption data to the trained predictive model; running the forecast engine for a plurality of parameters to obtain forecast data for a mining production target; comparing the forecast data for the mining production target to the actual data for the mining production target; determining deviations between the forecast data and the actual data, based on the comparing; and changing each of the plurality of parameters from the forecast data to the actual data to determine a contribution to the deviations for each of the plurality of parameters.

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**G01C 21/00** (2006.01)

(52) **U.S. Cl.**  
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**20 Claims, 13 Drawing Sheets**

