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(12) **United States Design Patent** (10) **Patent No.:** **US D930,025 S**  
**Li et al.** (45) **Date of Patent:** **\*\* Sep. 7, 2021**

- (54) **DISPLAY SCREEN WITH MODEL TRAINING GRAPHICAL USER INTERFACE** D656,945 S \* 4/2012 Lee ..... D14/486  
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- (71) Applicant: **Saudi Arabian Oil Company, Dhahran (SA)** D761,828 S \* 7/2016 Koeten ..... D14/486  
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- (72) Inventors: **Yupeng Li, Beijing (CN); Peng Lu, Dammam (SA)** D847,170 S \* 4/2019 Lirov ..... D14/486  
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- (73) Assignee: **Saudi Arabian Oil Company, Dhahran (SA)** 2004/0006530 A1 \* 1/2004 Allamon ..... G06Q 40/04  
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705/2
- (\*\*) Term: **15 Years** (Continued)

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(52) **U.S. Cl.**  
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3/04842; G06F 3/0485; G06F 3/04855;  
G06F 3/0486; G06F 3/0488; G06F  
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G06Q 40/04; E21B 43/16; H04L 63/10;  
G16H 10/60

See application file for complete search history.

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*Primary Examiner* — John M Otte  
(74) *Attorney, Agent, or Firm* — Fish & Richardson P.C.

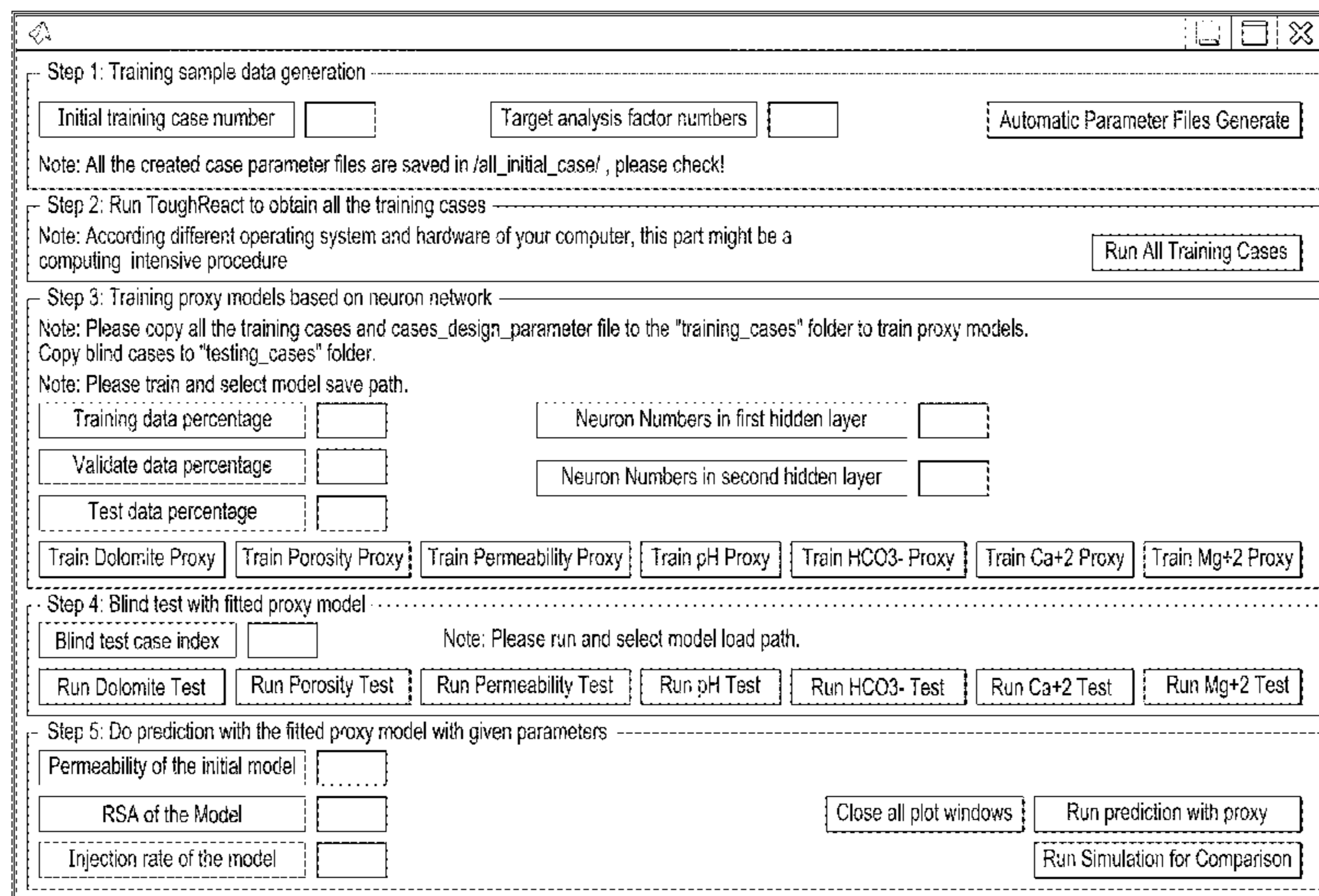
(57) **CLAIM**

The ornamental design for a display screen with model training graphical user interface, as shown and described.

**DESCRIPTION**

The FIGURE is a front view of a display screen with model training graphical user interface, showing our design.

**1 Claim, 1 Drawing Sheet**



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Step 1: Training sample data generation

Initial training case number  Target analysis factor numbers  Automatic Parameter Files Generate

Note: All the created case parameter files are saved in /all\_initial\_case/, please check!

Step 2: Run ToughReact to obtain all the training cases

Note: According different operating system and hardware of your computer, this part might be a computing intensive procedure

Run All Training Cases

Step 3: Training proxy models based on neuron network

Note: Please copy all the training cases and cases\_design\_parameter file to the "training\_cases" folder to train proxy models.  
Copy blind cases to "testing\_cases" folder.

Note: Please train and select model save path.

Training data percentage <input type="text"/>	Neuron Numbers in first hidden layer <input type="text"/>
Validate data percentage <input type="text"/>	Neuron Numbers in second hidden layer <input type="text"/>
Test data percentage <input type="text"/>	

Train Dolomite Proxy  Train Porosity Proxy  Train Permeability Proxy  Train pH Proxy  Train HCO3- Proxy  Train Ca+2 Proxy  Train Mg+2 Proxy

Step 4: Blind test with fitted proxy model

Blind test case index  Note: Please run and select model load path.

Run Dolomite Test  Run Porosity Test  Run Permeability Test  Run pH Test  Run HCO3- Test  Run Ca+2 Test  Run Mg+2 Test

Step 5: Do prediction with the fitted proxy model with given parameters

Permeability of the initial model

RSA of the Model

Injection rate of the model

Close all plot windows  Run prediction with proxy  Run Simulation for Comparison