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(71) Applicant: NATIONAL UNIVERSITY OF SINGAPORE [SG/SG]; 21 Lower Kent Ridge Road, Singapore 119077 (SG).

(72) Inventors: LI, Xinke; c/o National University of Singapore, College of Design and Engineering / Dept. of Industrial Systems Engineering and Management, 21 Lower Kent Ridge Road, Singapore 119077 (SG). CHEE, Yeow Meng; c/o National University of Singapore, College of Design and Engineering / Dept. of Industrial Systems Engineering and Management, 21 Lower Kent Ridge Road, Singapore 119077 (SG). CHIA, Ngcow Khing; c/o National University of Singapore, College of Design and Engineering / Dept. of Industrial Systems Engineering and Management, 21 Lower Kent Ridge Road, Singapore 119077 (SG).

(74) Agent: SOROKER AGMON NORDMAN PTE LTD; 111 Somerset Road #09-14, Singapore 238164 (SG).

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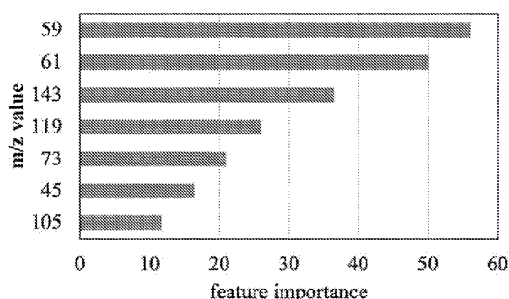


FIG. 3

(57) Abstract: The present application relates to methods of detecting the presence of a respiratory disease, such as COVID-19, in a subject. The method comprising the step of detecting or measuring a concentration of two or more biomarkers selected from the group consisting of Water, Methanol, 1,3-Butadiene, Acetone, Isoprene, Isobutyronitrile, 3-Methylpyridine, Pentanoic Acid, m-Cresol or p-Cresol, /V, /V-Dimethylaniline, and n-Decane in a sample obtained from the subject. Other biomarkers may include Hydrogen Peroxide, Trimethylamine, Methacrolein, Butanal, Propanoic Acid, Butanol, Carbon Disulfide, Aniline, Furfural, Cycloheptene, 1-Octene, Benzoic Acid, 6-Methyl-5-Hepten-2-one, 1-Decene, Dodecane, p-Damascenone, Sesquiterpene, Tetradecanoic Acid, and 1-Propanol. The methods include applying the concentrations to a decision tree or a logistic regression model.