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(71) Applicants: **NANYANG TECHNOLOGICAL UNIVERSITY** [SG/SG]; 50 Nanyang Avenue, Singapore 639798 (SG). **SP POWERASSETS LIMITED** [SG/SG]; 2 Kallang Sector, SP Building, Singapore 349277 (SG).

(72) Inventors: **ZHOU, Nan**; c/o Nanyang Technological University, 50 Nanyang Avenue, Singapore 639798 (SG). **YAN, Ziming**; c/o Nanyang Technological University, 50 Nanyang Avenue, Singapore 639798 (SG). **LI, Qiaoqiao**; c/o Nanyang Technological University, 50 Nanyang Avenue, Singapore 639798 (SG). **CHO, Sungin**; c/o SP POWERASSETS Limited, 2 Kallang Sector, SP Building, Singapore 349277 (SG). **XU, Yan**; c/o Nanyang Technological University, 50 Nanyang Avenue, Singapore 639798 (SG).

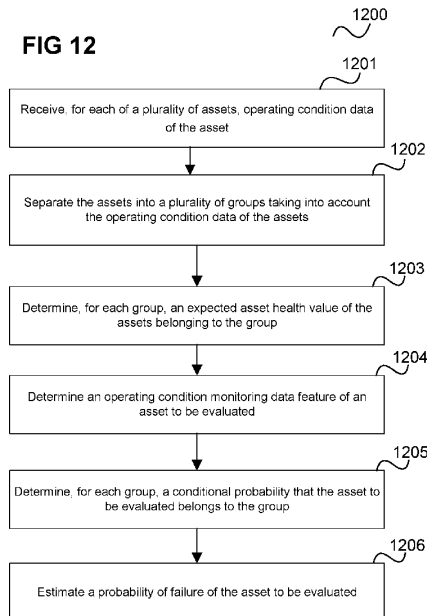
(74) Agent: **VIERING, JENTSCHURA & PARTNER LLP**; 230 Victoria Street, #07-06 Bugis Junction Towers, Singapore 188024 (SG).

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(54) Title: SYSTEM AND METHOD FOR ESTIMATING A FAILURE PROBABILITY OF ONE OR MORE INFRASTRUCTURE ASSETS

FIG 12



(57) Abstract: Aspects concern a method for asset health evaluation and management, comprising receiving, for each of a plurality of assets, operating condition data of the asset, separating the assets into a plurality of groups taking into account the operating condition data of the assets, determining, for each group, an expected failure probability based on the baseline statistical failure probability model, determining an operating condition monitoring data feature of an asset to be evaluated, determining, the probability distribution of the condition monitoring data feature, determining, for each group, a conditional probability that the asset to be evaluated belongs to the group given the observed condition data as prior event, determining, the expected failure probability of the asset to be evaluated by the summation of conditional probability of belonging to each group times the failure probability of each groups, wherein for each group, the respective failure probability is calculated by the baseline failure probability model that is fitted from statistical results, and determining the expected asset health index based on the expected failure probability for the asset to be evaluated.

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