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- (71) Applicant: **ALL SKIN INC** [CA/CA]; 3 Spring Mews SW,  
Calgary, Alberta T3H 3V1 (CA).
- (72) Inventors: **LEWINSON, Ryan T.**; 3 Spring Mews SW,  
Calgary, Alberta T3H 3V1 (CA). **VALLERAND, Isabelle  
A.**; 3 Spring Mews SW, Calgary, Alberta T3H 3V1 (CA).

- HUGHTS, John-douglas Matthew**; 3 Spring Mews SW,  
Calgary, Alberta T3H 3V1 (CA).
- (74) Agent: **OSLER, HOSKIN & HARCOURT LLP** et al.;  
Suite 1900, 340 Albert Street, Ottawa, K1R 7Y6 (CA).
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PRODUCT RECOMMENDATIONS

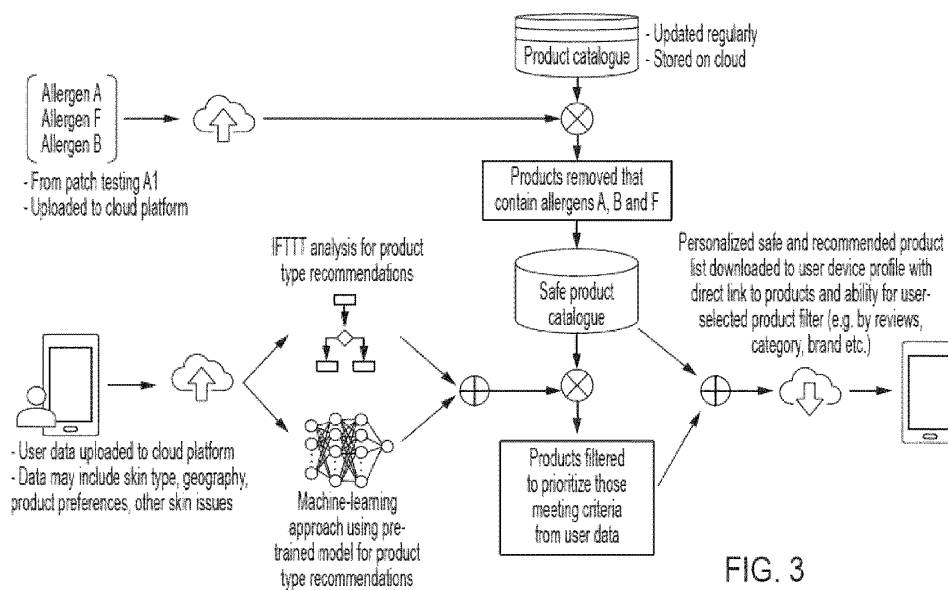


FIG. 3

(57) Abstract: We provide a system that detects skin contact reactions to a set of allergens. During operation, the system enables a user to acquire an image of a patch area through a camera in a portable device, wherein the patch area is located on the skin of a patient, and wherein a patch containing the set of allergens was applied to the patch area for a period of time and removed before the image was acquired. Next, the system preprocesses the image so that a resulting preprocessed image of the patch area has a prespecified size and orientation. The system then performs image-processing operations on the preprocessed image to identify regions of the patch area corresponding to positive skin contact reactions. The system labels each identified region with a specific allergen that was applied to the region to produce test results, which identify specific allergens that produced positive skin contact reactions.

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