A SMART SAFETY JACKET FOR PET

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Abstract: The present invention discloses a smart safety jacket for pet. The jacket consists of a location tracking system, a heartbeat sensor, a shock sensor, and a first aid solution container. The jacket is easily wearable for pets. Whenever any pet wears the jacket and goes outside of house, the location of the pet is sent to the owner in realtime.

Keywords: safety, jacket, pet

1. Introduction

In one of the object of the invention the jacket for pet consists of a location tracking system, a heartbeat sensor, a shock sensor, and a first aid solution container. In another object of the invention the jacket is easily wearable for pets.In yet another object of the invention whenever any pet wears the jacket and goes outside of house, the location of the pet is sent to the owner in realtime.

2. Literature Review

One patent discloses a pet jacket with lighting system formed by a jacket, characterized by being formed by a lighting system, a control unit and a battery that feeds the previous components. The lighting system allow the user to turn on and off the lighting that incorporates the jacket, and change the lighting mode, making this a continuous or blinking lighting, so that the pet is always located thanks to the greater visibility that this jacket provides. Another disclosed discloses a pet life jacket which can raise the swimming of main training dog and can provide convenience for searchers to searches and rescues overboard pets. None of the prior art discloses a smart safety jacket for pets which incorporates a continuous location tracking system and a first aid dispersion box.

3. Research Methodology

In one of the embodiment of the invention the smart safety jacket for pet consists of a location tracking system, a heartbeat sensor, a shock sensor, and a first aid solution container.

Referring now to Figure 1 which illustrates flow diagram depicting the processing of the jacket.

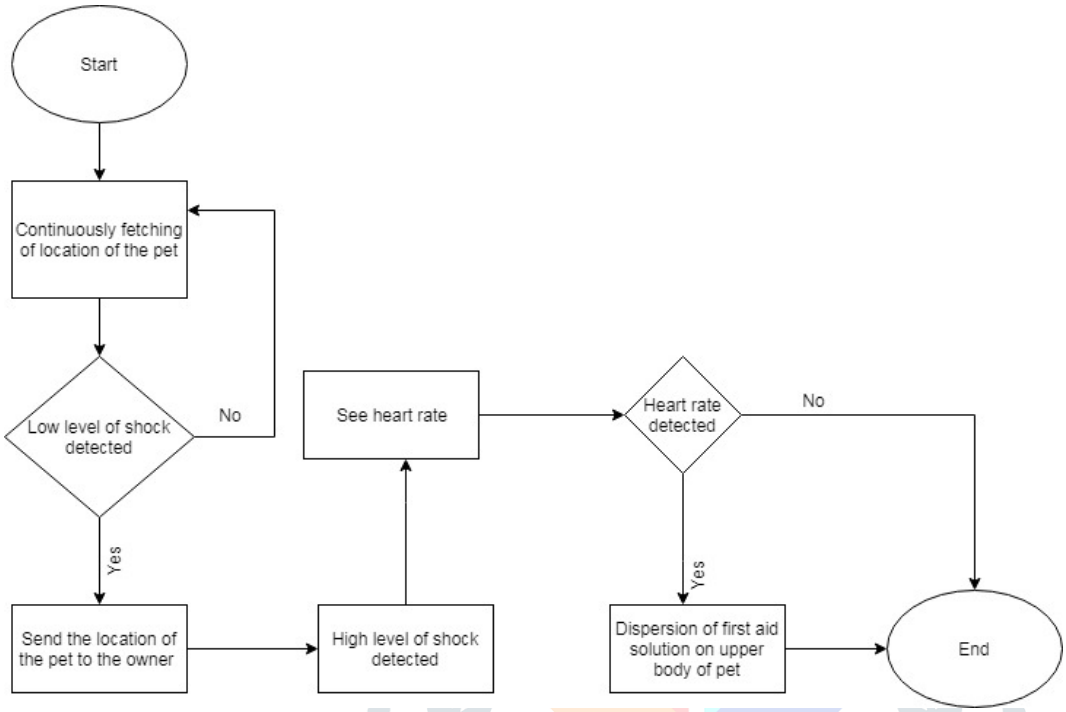

Figure 1. Block diagram

The location tracking system continuously fetches location of the pet. The shock sensor senses low level shock and high-level shock.

The first aid solution container contains a first aid solution. wherein the first aid solution is dispersed on upper part of the pet body whenever high heartbeat rate is detected by the heartbeat sensor.

As soon as the shock sensor senses low level shock the location tracking system sends location of the pet to owner. As soon as the shock sensor senses high level shock the heartbeat sensor is activated and senses the heartbeat of the pet, wherein if the heartbeat rate is high the first aid solution container disperses the first aid solution to upper part of the pet body.

In some of the embodiment of the invention the jacket is easily wearable for pets.

In yet another embodiment of the invention when any pet wears the jacket and goes outside of house, the location of the pet is sent to the owner in realtime.

In some of the embodiment of the invention the jacket is cost-effective

4. References

[1] Poupyrev, N.-W. Gong, S. Fukuhara, M. E. Karagozler, C. Schwesig and K. E. Robinson, "Project Jacquard: Interactive Digital Textiles at Scale", Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems, pp. 4216-4227, 2016.

[2] R. Lewis, T. L. Martin, M. Jones and P. Athanas, Analysis of a self-contained motion capture garment for e-textiles, 2011.

[3] R. Younes, K. Hines, J. Forsyth, J. Dennis, T. Martin and M. Jones, The design of smart garments for motion capture and activity classification. Smart Textiles and Their Applications, Elsevier Ltd, 2016, [online] Available: https://doi.org/10.1016/B978-0-08-100574-3.00027-8.

[4] L. M. Castano, A. E. Winkelmann and A. B. Flatau, A first approach to foot motion monitoring using conductive polymer sensors, vol. 7292, pp. 72922O, 2009, [online] Available: https://doi.org/10.1117/12.823423.

[5] Google, Inc., Google Earth software, http://earth.google.com/ [last accessed on Feb 1, 2008].

[6] Google, Inc, Keyhole Markup Language Documentation Introduction, http://code.google.com/apis/kml/documentation/ [last accessed on Feb 1, 2008]