



**GUJARAT TECHNOLOGICAL UNIVERSITY
(GTU)
INNOVATION COUNCIL (GIC)
Patent Search & Analysis Report
(PSAR)**



Date of Submission :

Dear **DAVE SANKET GOPALBHAI,**

Studied Patent Number for generation of PSAR :

PART 1: PATENT SEARCH DATABASE USED

- | | | |
|--|---|---|
| 1. Patent Search Database used | : | Google Patents |
| Web link of database | : | https://patents.google.com/ |
| 2. Keywords Used for Search | : | Human, activity, recognition |
| 3. Search String Used | : | |
| 4. Number of Results/Hits getting | : | 9999 |

PART 2: BASIC DATA OF PATENTED INVENTION /BIBLIOGRAPHIC DATA

- | | | |
|--|---|---|
| 5. Category/ Field of Invention | : | |
| 6. Invention is Related to/Class of Invention | : | Continuation of application No. 1 1/412.252 |
| 6 (a) : IPC class of the studied patent | : | G06K 9/00355 |
| 7. Title of Invention | : | Behavior Recognition System |
| 8. Patent No. | : | |
| 9. Application Number | : | 13/850,896 |
| 9 (a) : Web link of the studied patent | : | https://patentimages.storage.googleapis.com/b5/ac/53/9d2f5ccf739602/US9304593.pdf |
| 10. Date of Filing/Application (DD/MM/YYYY) | : | March 26/2013 |
| 11. Priority Date (DD/MM/YYYY) | : | |
| 12. Publication/Journal Number | : | |
| 13. Publication Date (DD/MM/YYYY) | : | |
| 14. First Filled Country : | : | USA |

15. Also Published as

Sr.No	Country Where Filled	Application No./Patent No.
1		

16. Inventor/s Details.

Sr.No	Name of Inventor	Address/City/Country of Inventor
1	Charles J. Cohen	Ann Arbor, MI (US)
2	Glenn J. Beach	Glass Lake, MI (US)

17. Applicant/Assignee Details.

Sr.No	Name of Applicant/Assignee	Address/City/Country of Applicant
1	Cybernet Systems Corporation,	Arbor, MI (US)

18. Applicant for Patent is : Company

PART 3: TECHNICAL PART OF PATENTED INVENTION**19. Limitation of Prior Technology / Art**

Poor image quality limits image segmentation's effectiveness.

20. Specific Problem Solved / Objective of Invention

To determine human activity using digital color image.

21. Brief about Invention

A system for recognizing various human and creature motion gaits and behaviors is presented. These behaviors are defined as combinations of "gestures" identified on various parts of a body in motion. For example, the leg gestures generated when a person runs are different than when a person walks. The system described here can identify such differences and categorize these behaviors. Gestures, as previously defined, are motions generated by humans, animals, or machines. Multiple gestures on a body (or bodies) are recognized simultaneously and used in determining behaviors. If multiple bodies are tracked by the system, then overall formations and behaviors (such as military goals) can be determined..

22. Key learning Points

Recognizing various human and creature motion gaits and behaviors is presented.

23. Summary of Invention

One method for having a computer represent its results for determining the foreground of an image is to direct the computer to segment out the foreground from an image. With the advancement and cost effectiveness of digital photography, many more digital images are being created than ever before. Many of these newly created digital images are taken of a person or people, whereby the person or people are arguably in the foreground of the image. Person or people segmentation from an entire image is currently a popular research topic in the field of computer vision. Most of the segmentation approaches rely heavily on training sets and accuracy of probabilistic models. Such approaches have the drawback of being computational and memory intensive. They are also sensitive to model mismatch since they are based on heavy assumptions.

24. Number of Claims : 20

25. Patent Status : Expired Patent

26. How much this invention is related with your IDP/UDP?

71 to 90%

27. Do you have any idea to do anything around the said invention to improve it? (Give short note in not more than 500 words)

The light that is focused on the image can be improved so that we can get the accurate result of the image.