

# PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
Name	Execution Date
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Kenneth A. Okin	07/22/2009
Kumar Ganapathy	07/22/2009
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Property Type	Number
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Total Attachments: 2	
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OP \$40.00 12490914

**500933124**

**PATENT**  
**REEL: 023073 FRAME: 0751**



## ASSIGNMENT

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, each undersigned inventor has sold and assigned, and by these presents hereby sells and assigns, unto:

**Virident Systems, Inc.**  
**500 Yosemite Drive, Suite 108**  
**Milpitas, CA 95035**

(hereinafter ASSIGNEE) all rights, title and interest in and to his invention relating to:

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in any form or embodiment thereof, in the United States and all other countries, including applications for patents in all countries throughout the world and through the Patent Cooperation Treaty and/or European Patent Convention, as set forth in his United States Patent Application (check one):

☐ executed concurrently herewith,  
☐ executed on \_\_\_\_\_,  
☒ Serial No. 12/490,914 filed 06/24/2009  
☐ PCT International Application, No.: \_\_\_\_\_, filed \_\_\_\_\_,

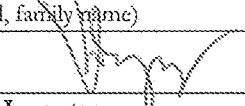
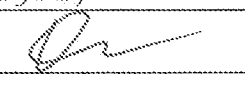
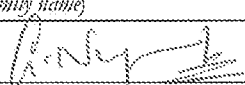
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Each of the undersigned hereby authorizes and requests the issuing authority to issue any and all such Letters patent to said ASSIGNEE, its successors or assigns in accordance herewith;

Each of the undersigned warrants and covenants that he has the full and unencumbered right to sell and assign the interests herein sold and assigned and that he has not executed and will not execute any document or instrument in conflict herewith;

Each of the undersigned further covenants and agrees he will communicate to said ASSIGNEE, its successors, legal representatives or assigns all information known to him relating to said invention or patent application and that he will execute and deliver any papers, make all rightful oaths, testify in any legal proceedings and perform all other lawful acts deemed necessary or desirable by said ASSIGNEE, its successors, legal representatives or assigns to perfect title to said invention, to said application including divisions and continuations thereof and to any and all Letters Patent which may be granted therefor or thereon, including reissues or extensions, in said ASSIGNEE, its successors, or assigns or to assist said ASSIGNEE, its successors, legal representatives or assigns in obtaining, reissuing or enforcing Letters Patent of the United States or other countries for said invention;

Each of the undersigned hereby grants the firm of **Alford Law Group, Inc.**, or any partner thereof, the power to insert in this Assignment any further identification which may be necessary or desirable to comply with the rules of the U.S. Patent and Trademark Office for recordation of this Assignment.

Full Name of First Inventor: (given name, middle initial, family name)		Vijay Karamcheti	
Inventor's Signature		Execution Date	8/3/2009
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Inventor's Signature		Execution Date	7/22/09
Full Name of Third Inventor: (given name, middle initial, family name)		Kumar Ganapathy	
Inventor's Signature		Execution Date	7/22/09

1021.P0007US1

INVENTION

Background of the invention: The present invention relates to a method and apparatus for the detection and localization of a target object in a three-dimensional space.

Summary of the invention: The present invention provides a method and apparatus for the detection and localization of a target object in a three-dimensional space, comprising the steps of: (a) transmitting a signal to the target object; (b) receiving a reflected signal from the target object; (c) processing the received signal to determine the position and orientation of the target object; and (d) displaying the position and orientation of the target object on a display device.

DETAILED DESCRIPTION OF THE INVENTION

The present invention is a method and apparatus for the detection and localization of a target object in a three-dimensional space. The method comprises the steps of: (a) transmitting a signal to the target object; (b) receiving a reflected signal from the target object; (c) processing the received signal to determine the position and orientation of the target object; and (d) displaying the position and orientation of the target object on a display device.

FIG. 1 is a block diagram of the apparatus of the present invention. The apparatus includes a transmitter 10, a receiver 20, a processor 30, and a display device 40. The transmitter 10 is connected to the receiver 20, which is connected to the processor 30. The processor 30 is connected to the display device 40.

The transmitter 10 transmits a signal to the target object. The receiver 20 receives a reflected signal from the target object. The processor 30 processes the received signal to determine the position and orientation of the target object. The display device 40 displays the position and orientation of the target object.

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