

(12) **United States Patent**  
**Leahy et al.**

(10) **Patent No.:** **US 8,082,501 B2**  
(45) **Date of Patent:** **\*Dec. 20, 2011**

(54) **SYSTEM AND METHOD FOR ENABLING  
USERS TO INTERACT IN A VIRTUAL SPACE**

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(\* ) Notice: Subject to any disclaimer, the term of this  
patent is extended or adjusted under 35  
U.S.C. 154(b) by 0 days.

This patent is subject to a terminal dis-  
claimer.

(21) Appl. No.: **12/406,968**

(22) Filed: **Mar. 19, 2009**  
(Under 37 CFR 1.47)

(65) **Prior Publication Data**

US 2009/0183089 A1 Jul. 16, 2009

**Related U.S. Application Data**

(63) Continuation of application No. 12/353,218, filed on  
Jan. 13, 2009, now Pat. No. 7,945,856, which is a  
continuation of application No. 11/591,878, filed on  
Nov. 2, 2006, now Pat. No. 7,493,558, which is a  
continuation of application No. 09/632,154, filed on  
Aug. 3, 2000, now Pat. No. 7,181,690, which is a  
continuation of application No. 08/747,420, filed on  
Nov. 12, 1996, now Pat. No. 6,219,045.

(60) Provisional application No. 60/020,296, filed on Nov.  
13, 1995.

(51) **Int. Cl.**  
**G06F 15/00** (2006.01)  
**G06F 13/00** (2006.01)

(52) **U.S. Cl.** ..... **715/706; 715/756**

(58) **Field of Classification Search** ..... **715/704-706,  
715/853-855, 751-753, 756, 736, 762**  
See application file for complete search history.

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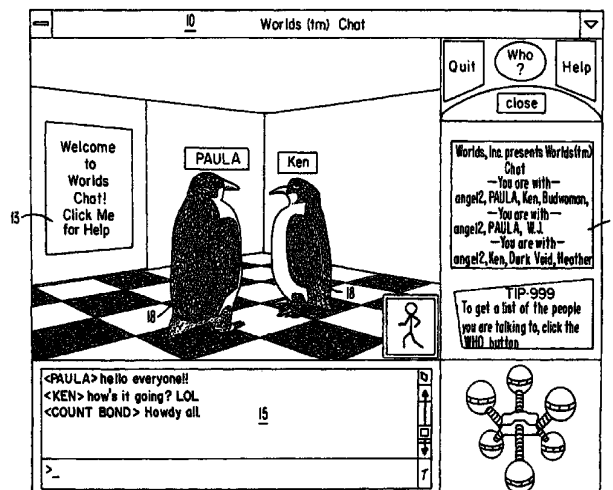
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(57) **ABSTRACT**

The present invention provides a highly scalable architecture  
for a three-dimensional graphical, multi-user, interactive vir-  
tual world system. In a preferred embodiment a plurality of  
users interact in the three-dimensional, computer-generated  
graphical space where each user executes a client process to  
view a virtual world from the perspective of that user. The  
virtual world shows avatars representing the other users who  
are neighbors of the user viewing the virtual world. In order  
that the view can be updated to reflect the motion of the  
remote user's avatars, motion information is transmitted to a  
central server process which provides positions updates to  
client processes for neighbors of the user at that client pro-  
cess. The client process also uses an environment database to  
determine which background objects to render as well as to  
limit the movement of the user's avatar.

**17 Claims, 5 Drawing Sheets**



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