



US008082501B2

(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 disclaimer.

(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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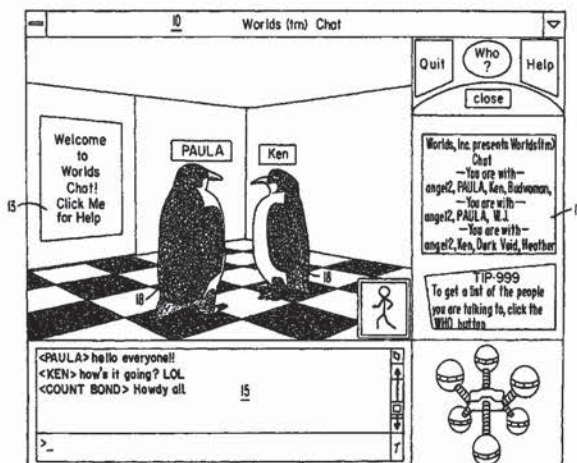
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(57) **ABSTRACT**

The present invention provides a highly scalable architecture for a three-dimensional graphical, multi-user, interactive virtual 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 process. 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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