US005577913A

United States Patent [19]

Moncrief et al.

[11] **Patent Number:** **5,577,913**

[45] **Date of Patent:** ***Nov. 26, 1996**

[54] **SYSTEM AND METHOD FOR DRIVER TRAINING WITH MULTIPLE DRIVER COMPETITION**

[75] Inventors: **Rick L. Moncrief; Stephanie J. Mott**, both of San Jose; **Max L. Behensky**, Hayward; **Jed Margolin**, San Jose, all of Calif.

[73] Assignee: **Atari Games Corporation**, Milpitas, Calif.

[*] Notice: The term of this patent shall not extend beyond the expiration date of Pat. No. 5,354,202.

[21] Appl. No.: **319,602**

[22] Filed: **Oct. 7, 1994**

Related U.S. Application Data

[63] Continuation of Ser. No. 80,582, Jun. 18, 1993, Pat. No. 5,354,202, which is a continuation of Ser. No. 739,906, Aug. 1, 1991, abandoned, which is a continuation-in-part of Ser. No. 561,087, Aug. 1, 1990, abandoned.

[51] **Int. Cl.^{6}** **G09B 9/04**
[52] **U.S. Cl.** .... **434/69**; 434/65; 434/307 R; 434/373; 273/454
[58] **Field of Search** .... 434/29, 38, 43, 434/62, 65, 69, 307 R, 308, 373; 273/85 G, 86 R, 86 B, 434, 437, 440, 442, 445, 454, DIG. 28; 364/410, 578; 395/152; 348/121; 345/4

[56] **References Cited**

U.S. PATENT DOCUMENTS

4,383,827	5/1983	Foerst .	
4,710,873	12/1987	Breslow et al.	364/410
4,716,458	12/1987	Heitzman et al. .	
4,750,888	6/1988	Allard et al. .	
4,760,388	7/1988	Tatsumi et al.	434/69 X
5,005,148	4/1991	Behensky et al.	434/69 X
5,240,417	8/1993	Smithson et al.	434/61
5,269,687	12/1993	Mott et al.	434/69
5,354,202	10/1994	Moncrief et al.	343/69

FOREIGN PATENT DOCUMENTS

0145598	6/1985	European Pat. Off. .	
0404381	12/1990	European Pat. Off. .	
3816543	11/1989	Germany .	
8620293	4/1990	Germany .	
9000851	4/1990	Germany .	
WO88/06776	9/1988	WIPO	482/902
9111792	8/1991	WIPO .	

OTHER PUBLICATIONS

"Hard Drivin'" Advertising Brochure, Atari Games Corporation, 1988.

"Hard Drivin'" Operator's Manual, Atari Games Corporation, pp. ii, 1–4, 1–5, 1989.

Primary Examiner—Joe Cheng
Attorney, Agent, or Firm—Knobbe, Martens, Olson & Bear

[57] **ABSTRACT**

A driver training system for a user of a simulated vehicle. The system includes input devices for controlling the simulated vehicle, a video display having three-dimensional graphics, modeling software for determining position information based on the input devices, and recursive training software to display a previous route through an environment simultaneously with a present route through the environment. The user then incrementally and recursively maximizes parameters associated with vehicle operation skill. In addition, a present user may compete with one or more previous users by having previously recorded routes played back on the video display simultaneously with the route of the present user. The driver training system may be embodied as an arcade game.

21 Claims, 11 Drawing Sheets