

1 GOODIN, MACBRIDE, SQUERI, RITCHIE & DAY, LLP  
2 ROBERT A. GOODIN, State Bar No. 061302  
3 FRANCINE T. RADFORD, State Bar No. 168269  
4 505 Sansome Street, Suite 900  
5 San Francisco, California 94111  
6 Telephone: (415) 392-7900  
7 Facsimile: (415) 398-4321

8 PILLSBURY WINTHROP SHAW PITTMAN LLP  
9 THOMAS V. LORAN III, State Bar No. 95255  
10 JOANNE H. KIM, State Bar No. 221525  
11 50 Fremont Street  
12 Post Office Box 7880  
13 San Francisco, CA 94120-7880  
14 Telephone: (415) 983-1000  
15 Facsimile: (415) 983-1200

16 Attorneys for Amicus Curiae Common Sense Media

17 UNITED STATES DISTRICT COURT  
18 NORTHERN DISTRICT OF CALIFORNIA  
19 SAN JOSE DIVISION

20 VIDEO SOFTWARE DEALERS and  
21 ENTERTAINMENT SOFTWARE  
22 ASSOCIATION,

23 Plaintiffs,

24 v.

25 ARNOLD SCHWARZENEGGER, in his  
26 official capacity as Governor of the State of  
27 California; BILL LOCKYER, in his official  
28 capacity as Attorney General of the State of  
California; GEORGE KENNEDY, in his  
official capacity as Santa Clara County  
District Attorney; RICHARD DOYLE, in his  
official capacity as City Attorney for the City  
of San Jose, and ANN MILLER RAVEL, in  
her official capacity as County Counsel for  
the County of Santa Clara.

Defendants.

No. C 05 4188 RMW RS

**DECLARATION OF  
UTE RITTERFELD**

Date: May 12, 2006

Time: 9:00 a.m.

Courtroom: 6

Before the Honorable Ronald M. Whyte

Case No. C 05 4188 RMW RS

DECLARATION OF UTE RITTERFELD

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28

I, Ute Ritterfeld, declare:

1. I received a doctorate in psychology from the University of Magdeburg in Germany in 2004. I am currently Research Associate Professor at the Annenberg School for Communication at the University of Southern California in Los Angeles, California. I am part of a team that received a \$263,000 grant in 2003 from the Annenberg Endowment to study computer games and part of a team that received \$100,000 from the Sunnylands Trust to establish the Annenberg Institute for Youth and Media, and I received a \$17,000 grant in 2005 from the Annenberg Endowment to study computer games. A true and correct copy of my curriculum vitae is attached hereto as Exhibit A. I make this declaration in opposition to plaintiffs’ motion for summary judgment. I know the following facts of my own knowledge, and if called as a witness, could testify competently thereto.

2. Together with two other researchers, I published an article in the January 2006 issue of the journal *Media Psychology* entitled **Does Playing Violent Video Games Induce Aggression? Empirical Evidence of a Functional Magnetic Resonance Imaging Study** (Weber, R.; Ritterfeld, U., and Mathiak, K.).

3. The article’s abstract is as follows: “This study aims to advance the media effects debate concerning violent video games. Meta-analytic reviews reveal a small but noticeable association between playing violent video games and aggressive reactions. However, evidence for causal associations is still rare. In a novel, event-related functional magnetic resonance imaging study, 13 male research participants were observed playing a latest-generation violent video game. Each participant’s game play was recorded and content analyzed on a frame-by-frame basis. Onscreen activities were coded as either “passive/dead, no interactions”; “active/safe, non imminent danger occurs, violent interaction expected”; “active/under attack, some violent interaction”; and “active/fighting and killing, many violent interactions.” Previous studies in neuroscience on aggressive thoughts and behaviors suggested that virtual violence would suppress affective areas of the anterior cingulate cortex (ACC) and the amygdala subsequent to activity variations at cognitive areas of the ACC. Comparison of game play

1 activities with and without virtual violence in 11 participants confirmed the hypothesis. The  
2 rather large observed effects can be considered as caused by virtual violence. We discuss the  
3 applicability of neuroscience methodology in media effects studies, with a special emphasis on  
4 the assumption of virtuality prevalent in video game play.”

5  
6 4. In laymen’s terms, the article is summarized in paragraphs 5 through 8  
7 below.

8 5. This study used an advanced methodology that likely demonstrates a causal  
9 relationship between playing violent video games and brain activity during the game play  
10 associated with aggression. Participants were put into a functional magnetic resonance imaging  
11 (fMRI) scanner where they played the first person shooter game “Tactical Ops: Assault on  
12 Terror.” When the players engaged in violent actions on the screen, they exhibited changes in  
13 brain patterns associated with aggression. When their actions on screen were neutral or non-  
14 violent, these changes in brain patterns associated with aggression did not present themselves.

15 6. Because the data pit real time brain activity against game play and  
16 controlling for arousal, there was little room for confounding variables to have impacted the  
17 results. The observed effects reflect brain activity in the moment of the game play.

18  
19 7. Given the high cost of gathering fMRI data, and the ethical concerns of  
20 conducting such a study on minors, there were only 13 participants in the study, and their average  
21 age was around 23.

22 8. I declare under penalty of perjury under the laws of the State of California  
23 that the foregoing is true and correct. Executed on April 18, 2006 at Los Angeles, California.  
24

25  
26 \_\_\_\_\_  
Ute Ritterfeld

27  
28 3234/001/X77116.v1