

Case3:08-cv-04548-MHP Document39 Filed10/07/08 Page2 of 6 PICTURES CORP., a Delaware corporation; SONY PICTURES ENTERTAINMENT, INC., a Delaware corporation; TWENTIETH CENTURY FOX FILM CORP., a Delaware corporation; NBC UNIVERSAL, INC., a Delaware corporation; WARNER BROS. ENTERTAINMENT, INC., a Delaware corporation; and VIACOM, Inc., a Delaware Corporation, Defendants and **Counter-Complainants** SUPPLEMENTAL DECLARATION OF

DR. ALAN E. BELL

SUPPLEMENTAL DECLARATION OF DR. ALAN E. BELL

I, Dr. Alan E. Bell, declare as follows:

- 1. I have previously filed a Declaration in support of Plaintiffs' application for a temporary restraining order and to show cause, and I file this Supplemental Declaration in support of Plaintiffs' application for a temporary restraining order and order to show cause. I have reviewed the original declaration of Dr. John P. J. Kelly as well as the declarations of Jeffrey Buzzard and Edward W. Felten.
- I am familiar with the CSS content-protection system as well as provisions of the CSS
 License Agreement from having participated in the development of the CSS standard in the mid1990s.

REALDVD DIFFERS IN SIGNIFICANT WAYS FROM THE KALEIDESCAPE SYSTEM

- 3. The RealDVD software product differs in significant ways from the Kaleidescape product at issue in *DVD Copy Control Ass'n*, *Inc. v. Kaleidescape*, *Inc.*, 1:04 CV 031829 (Santa Clara County). I was a witness in the *Kaledescape* litigation and learned about the product as part of my involvement in that case. Most obviously, the RealDVD product is a piece of software which operates within and requires an otherwise general purpose personal computer system environment to function. It is my understanding, however, that the Kaleidescape product is a combination of dedicated software and specified hardware that operates in a self-contained manner, without the need of a supplemental personal computer system. The Kaleidescape product stores the DVD copies on its own internal hardware, and it does not appear to run software other than the special Kaleidescape software sold as a part of the total Kaleidescape system product.
- 4. Because Kaleidescape software appears to operate based on a self-contained and dedicated hardware system, the product is more akin to a traditional consumer-electronics device than RealDVD software, which must be first downloaded and then installed on an otherwise general purpose personal computer. For this reason, different provisions of the CSS license apply to Kaleidescape than apply to RealDVD.

REALDVD BYPASSES CGMS "COPYNEVER" SIGNALS

- 5. In addition to the content and navigation data required to create the user playback experience, DVDs contain various data indicating whether or not the content is copyrighted and, if it is copyrighted, CGMS indicator bits that signal the compliant player the copy permission status of the copyrighted content. At the direction of the content owner, DVD content is almost invariably marked "CopyNever" which corresponds to the two CGMS indicator bits being set as (1,1). In the normal course of playback by a compliant CSS player, the presence of the CGMS (1,1) setting would prohibit the making of a copy of the protected DVD content so indicated. However, RealDVD copies protected DVD copyrighted content despite the inclusion of CGMS "CopyNever" indicator bits In doing so, RealDVD bypasses technological measures specifically designed to prohibit copying. If the content owner chooses to, the two CGMS indicator bits may be set to (0,0), corresponding to "copy permitted". In this case the compliant CSS software would be clearly signaled that it is permitted by the content owner of the copyright material that a copy may be made.
- 6. Encrypted video content on DVDs is organized into data files, which are in turn comprised of data divided into "sectors." Each such "sector" begins with a "sector header" area that, amongst other information, includes (a) an indicator of whether or not the associated video content is copyrighted or not and (b) a CGMS indicator, which indicates whether or not the associated data can be copied.
- 7. For commercially produced DVDs released by major studios, the information recorded in each sector almost invariably indicates, at the direction of the content owner that the content (a) is copyrighted and (b) *is not to be copied*.
- 8. As explained above, using the CGMS indicator bits, a content provider can designate that the content cannot be copied by setting two bits to a value of (1,1), corresponding to a command of "CopyNever." In the normal course of operation, the presence of the "CopyNever" signal will be interpreted and understood as a signal that prohibits either a compliant consumerelectronic device or a compliant SW DVD player on a computer from copying the associated content on a DVD.

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1	9. In the course of playing back a typical two-hour movie, a DVD Drive and Player will
2	read more than one million distinct sectors and sector headers in order to play back the entire
3	movie In the case of a DVD where the CGMS indicator is set to "CopyNever," a Drive and
4	Player would thus appear to receive more than one million signals indicating that the content shall
5	not be copied.
6	10. I understand from the public redacted declaration of Edward W. Felten that
7	RealDVD "preserves" the CGMS indicators in the copy that it makes of a protected DVD. I infer
8	from this that whenever the RealDVD application receives and processes the CGMS
9	"CopyNever" signals from a given DVD that, even though it may well preserve them, it must
10	otherwise bypass the "Copy Never" signals. Ironically, RealDVD software is apparently acting to
11	"preserve" the "CopyNever" signal bits contained within the DVD on the very copies that
12	RealDVD produces after bypassing them
13	
14	I declare under penalty of perjury under the laws of the United States that the foregoing is
15	true and correct and that this declaration was executed this 7th day of October 2008 at San
16	Francisco, California.
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19	See attached page
20	Dr. Alan E. Bell
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12	RealDVD produces after bypassing them
13	
14	I declare under penalty of perjury under the laws of the United States that the foregoing is
15	true and correct and that this declaration was executed this 6th day of October 2008 at San
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19	Mar Bell

Dr. Alan E. Bell

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