

EXHIBIT 28

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IN THE
UNITED STATES PATENT AND TRADEMARK OFFICE
ART UNIT 2305
Examiner H. Nguyen

Richard A. Lang
CASE 249
SERIAL NO. 07/775,182
FILED October 11, 1991
SUBJECT AUDIO/VIDEO RECORDER/TRANSCIEIVER

THE COMMISSIONER OF PATENTS AND TRADEMARKS
WASHINGTON, D.C. 20231

SIR:

INFORMATION DISCLOSURE STATEMENT

Pursuant to the provisions of 37 CFR 1.56, 1.97, and 1.98, applicant submits herewith copies of twenty-one prior art references, some of which were cited in the parent and grandparent applications and the remainder of which have otherwise come to applicant's attention, together with two sheets of Form PTO-1449 on which the twenty-one references are cited. A concise explanation of the relevance of each of these cited references follows:

U.S. Patent No. 4,179,709 to Workman describes an apparatus and method for transmitting a digital image over a limited bandwidth communications channel in which a block transformation technique involving transform coefficients is employed;

U.S. Patent No. 4,274,133 to Southworth et al. describes a slow-scan television system;

U.S. Patent No. 4,446,490 to Hoshimi et al. describes a pulse code modulation (PCM) signal processor.

U.S. Patent No. 4,506,387 to Walter describes a programming-on-demand

cable television system in which a video program is divided into a number of segments and stored in a segmented memory in compressed digital form, the stored video segments then being converted from electrical data to optical data and simultaneously transmitted over a plurality of parallel fiber optic lines to a data receiving station, which then reconverts the optical data back to the original electrical data;

U.S. Patent No. 4,511,934 to Ohira et al. describes a video tape recorder having a rotary magnetic head drum.

U.S. Patent No. 4,516,516 to Fabris et al. describes a video teleconferencing system in which teleconferencing cameras are remotely controlled by participants of the teleconference.

U.S. Patent No. 4,563,710 to Baldwin describes a multiple head helical scanning device for television tape recording in which the multiple heads are disposed on a rotatable headwheel.

U.S. Patent No. 4,625,080 to Scott describes a telephone-based programming system for a remotely located video cassette recorder.

U.S. Patent No. 4,654,484 to Reiffel et al. describes a method for compressing single-frame video images for slow-scan television.

U.S. Patent No. 4,698,664 to Nichols et al. describes a multiple-screen editing system that permits quicker editing of recorded information.

U.S. Patent No. 4,709,418 to Fox et al. describes an interactive wideband cable network.

U.S. Patent No. 4,724,491 to Lambert describes a system for automatically inserting television advertising spots in video programs.

U.S. Patent No. 4,736,239 to Sprague et al. describes a compression/storage method for video RAM storage of a limited number of frames of video information.

U.S. Patent No. 4,743,959 to Frederiksen describes a video acquisition and compression system that prepares video information for transmission at real-time rates.

U.S. Patent No. 4,750,034 to Lem describes an apparatus for monitoring the replay of audio/video information carriers.

U.S. Patent No. 4,768,110 to Dunlap et al. describes a dual-deck video cassette recorder.

U.S. Patent No. 4,774,574 to Daly et al. describes a block transformation method for transmitting a digital image over a limited bandwidth communication channel.

U.S. Patent No. 4,821,208 to Ryan et al. describes a display processor for computer-generated displays.

U.S. Patent No. 4,851,931 to Parker et al. describes an apparatus and method for rapidly creating a custom tape of musical pieces selected from a music library.

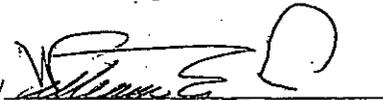
U.S. Patent No. 4,868,653 to Golin et al. describes a method and apparatus for compression of video information to make it suitable for recording and transmission using relatively narrow band media.

U.S. Patent No. 4,918,523 to Simon et al. describes a digital video formatting and transmission system and method.

Respectfully submitted,

Richard A. Lang

By



William E. Hein
Patent Attorney #26,465

January 20, 1992
(303) 667-6741
Loveland, Colorado

Sheet 1 of 2

LIST OF PATENTS, PUBLICATIONS, AND OTHER INFORMATION DISCLOSED BY APPLICANT (Use several sheets if necessary)				ATTY. DOCKET NO. 249		SERIAL NO. RECEIVED 2107/75-182 230							
				APPLICANT Richard A. Lang 1992 JAN 22		FILING DATE October 11, 1991		GROUP 2 PM 3:15 2305					
U.S. PATENT DOCUMENTS													
EXAMINER INITIAL		DOCUMENT NUMBER						DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
<i>HW</i>	AA	4	1	7	9	7	0	9	1/1979	Workman	353	133	
<i>HW</i>	AB	4	4	0	0	7	1	7	5/1983	Southworth et al.	358	13	
<i>HW</i>	AC	4	5	0	6	3	8	7	7/1985	Walter	455	612	
<i>HW</i>	AD	4	5	1	1	9	3	4	3/1985	Ohira et al.	360	55	
<i>HW</i>	AE	4	5	1	6	1	5	6	4/1985	Fabris et al.	358	85	
<i>HW</i>	AF	4	5	6	3	7	1	0	4/1986	Baldwin	360	9.1	
<i>HW</i>	AG	4	6	2	5	0	8	0	4/1986	Scott	379	104	
<i>HW</i>	AH	4	6	5	4	4	8	4	3/1987	Reiffel et al.	379	53	
<i>HW</i>	AI	4	6	9	8	6	6	4	3/1987	Nichols et al.	358	10	
<i>HW</i>	AJ	4	7	0	9	4	1	8	3/1987	Fox et al.	455	612	
<i>HW</i>	AK	4	7	2	4	4	9	1	1988	Lambert	358	310	
FOREIGN PATENT DOCUMENTS													
		DOCUMENT NUMBER						DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
												YES	NO
	AL												
	AM												
	AN												
	AO												
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	AR												
	AS												
	AT												
EXAMINER <i>Huy Nguyen</i>								DATE CONSIDERED <i>3/4/92</i>					
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.													

Sheet 2 of 2

LIST OF PATENTS, PUBLICATIONS, AND OTHER INFORMATION DISCLOSED BY APPLICANT (Use several sheets if necessary)				ATTY. DOCKET NO. 249		SERIAL NO. 67775, 082 GROUP 230								
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U.S. PATENT DOCUMENTS														
EXAMINER INITIAL		DOCUMENT NUMBER							DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
													YES	NO
WV	AA	4	7	3	6	2	3	9	7/1988	Sprague et al.	358	21R		
WV	AB	4	7	4	3	9	5	9	9/1988	Frederiksen	358	11		
WV	AC	4	7	5	0	0	3	4	9/1988	Lem	358	84		
WV	AD	4	7	6	8	1	1	0	1988	Dunlap et al.	360	33.1		
WV	AE	4	7	7	4	5	7	4	1988	Daly et al.	358	133		
WV	AF	4	8	2	1	2	0	8	4/1989	Ryan et al.	364	518	10/1986	
WV	AG	4	8	5	1	9	3	1	7/1989	Parker et al.	360	15	2/1987	
WV	AH	4	8	6	8	6	5	3	9/1989	Golin et al.	358	133	10/1987	
WV	AI	4	9	1	8	5	2	3	4/1990	Simon et al.	358	133	10/1987	
WV	AJ	4	4	4	6	4	9	0	1/1984	Hoshimi et al.	360	32		
	AK													
FOREIGN PATENT DOCUMENTS														
		DOCUMENT NUMBER							DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
													YES	NO
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	AM													
	AN													
	AO													
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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)														
	AR													
	AS													
	AT													
EXAMINER <i>Greg Decegen</i>										DATE CONSIDERED <i>3/4/92</i>				
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