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Monroe

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(54) **APPARATUS FOR CAPTURING, CONVERTING AND TRANSMITTING A VISUAL IMAGE SIGNAL VIA A DIGITAL TRANSMISSION SYSTEM**

- 4,891,650 A 1/1990 Sheffer
- 4,910,692 A 3/1990 Outram
- 5,027,104 A 6/1991 Reid
- 5,027,114 A 6/1991 Kawashime et al.
- 5,042,061 A 8/1991 Kaneko et al.
- 5,091,780 A 2/1992 Pomerleau
- 5,111,291 A 5/1992 Erickson
- 5,136,628 A 8/1992 Araki et al.
- 5,164,979 A 11/1992 Choi et al.
- 5,166,746 A 11/1992 Sato et al.

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FOREIGN PATENT DOCUMENTS

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OTHER PUBLICATIONS

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H04N 1/00 (2006.01)
G06F 3/12 (2006.01)

Apr. 1966, Apollo Unified S-Band System, NASA-Goddard Space Flight Center, Greenbelt, Maryland.

(52) **U.S. Cl.** **358/1.15**; 358/402; 358/403; 358/407

(Continued)

(58) **Field of Classification Search** 358/1.15, 358/402, 403, 407, 442, 468, 474
See application file for complete search history.

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(56) **References Cited**

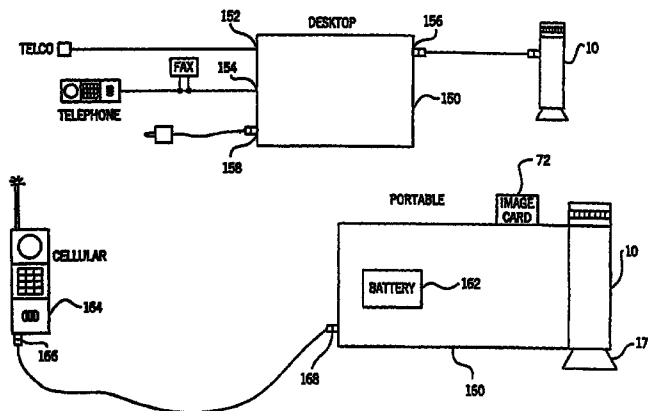
(57) **ABSTRACT**

U.S. PATENT DOCUMENTS

- 4,163,283 A 7/1979 Darby
- 4,179,695 A 12/1979 Levine et al.
- 4,197,536 A 4/1980 Levine
- 4,516,125 A 5/1985 Schwab et al.
- 4,688,244 A * 8/1987 Hannon et al. 377/58
- 4,831,438 A 5/1989 Bellman, Jr. et al.
- 4,845,629 A 7/1989 Murge
- 4,857,912 A 8/1989 Everett, Jr. et al.

An image capture, conversion, compression, storage and transmission system provides a data signal representing the image in a format and protocol capable of being transmitted over any of a plurality of readily available transmission systems and received by readily available, standard equipment receiving stations. In its most comprehensive form, the system is capable of sending and receiving audio, documentary and visual image data to and from standard remote stations readily available throughout the world.

31 Claims, 73 Drawing Sheets



U.S. PATENT DOCUMENTS

5,218,367	A	6/1993	Sheffer et al.	
5,243,340	A	9/1993	Norman et al.	
5,243,530	A	9/1993	Stanifer et al.	
5,268,698	A	12/1993	Smith, Sr. et al.	
5,283,643	A	2/1994	Fujimoto	
5,321,615	A	6/1994	Frisbie et al.	
5,334,982	A	8/1994	Owen	
5,351,194	A	9/1994	Ross et al.	
5,400,031	A	3/1995	Fitts	
5,400,068	A	3/1995	Ishida et al.	
5,408,330	A	4/1995	Squicciarini et al.	
5,432,838	A	7/1995	Purchase	
5,440,337	A	8/1995	Henderson et al.	
5,440,343	A	8/1995	Parulski	
5,448,243	A	9/1995	Bethke et al.	
5,463,595	A	10/1995	Rochall et al.	
5,469,371	A	11/1995	Bess	
5,485,504	A	1/1996	Ohnsorge	
5,497,149	A	3/1996	Fast	
5,508,736	A	4/1996	Cooper	
5,517,683	A *	5/1996	Collett et al.	455/575.1
5,530,440	A	6/1996	Danzer et al.	
5,546,194	A *	8/1996	Ross	358/445
5,550,646	A *	8/1996	Hassan et al.	358/442
5,553,609	A	9/1996	Chen et al.	
5,557,254	A	9/1996	Johnson et al.	
5,557,278	A	9/1996	Piccirillo et al.	
5,598,167	A	1/1997	Zjderhand	
5,612,668	A	3/1997	Scott	
5,627,753	A	5/1997	Brankin et al.	
5,629,691	A	5/1997	Jain	
5,636,122	A	6/1997	Shah et al.	
5,642,285	A	6/1997	Woo	
5,666,157	A	9/1997	Avid	
5,666,159	A *	9/1997	Parulski et al.	348/211.2
5,670,961	A	9/1997	Tomita et al.	
5,677,979	A	10/1997	Squicciarini	
5,689,300	A *	11/1997	Shibata et al.	348/14.07
5,689,442	A	11/1997	Swanson	
5,712,679	A	1/1998	Coles	
5,712,899	A	1/1998	Pace, II	
5,714,948	A	2/1998	Farmakis et al.	
5,742,336	A	4/1998	Lee	
5,751,346	A	5/1998	Dozler	
5,777,551	A	7/1998	Hess	
5,777,580	A	7/1998	Janky et al.	
5,793,416	A	8/1998	Rostoker et al.	
5,835,059	A	11/1998	Nadel et al.	
5,850,180	A	12/1998	Hess	
5,867,804	A	2/1999	Pilley et al.	
5,917,405	A	6/1999	Joso	
5,926,210	A	7/1999	Hackett et al.	
5,933,098	A	8/1999	Haxton	
5,938,706	A	8/1999	Feldman	
5,974,158	A	10/1999	Auty et al.	
5,983,161	A	11/1999	Lemelson et al.	
5,995,041	A *	11/1999	Bradley et al.	342/357.1
5,999,116	A	12/1999	Evers	
6,002,427	A	12/1999	Kipust	
6,009,356	A	12/1999	Monroe	
6,035,212	A *	3/2000	Rostoker et al.	455/552.1
6,036,086	A *	3/2000	Sizer et al.	235/375
6,067,571	A	5/2000	Igarashi et al.	
6,069,655	A	5/2000	Seeley	
6,072,600	A *	6/2000	Wertsberger	358/479
6,078,850	A	6/2000	Kane et al.	
6,084,510	A	7/2000	Lemelson et al.	
6,092,008	A	7/2000	Bateman	
6,100,964	A	8/2000	De Cremiers	

6,157,317	A	12/2000	Walker	
6,181,373	B1	1/2001	Coles	
6,195,609	B1	2/2001	Pilley et al.	
6,226,031	B1	5/2001	Barraciough et al.	
6,243,056	B1 *	6/2001	Jachimowicz et al.	345/82
6,246,320	B1	6/2001	Monroe	
6,259,475	B1	7/2001	Ramachandran et al.	
6,275,231	B1	8/2001	Obradovich	
6,278,965	B1	8/2001	Glass et al.	
6,282,488	B1	8/2001	Castor et al.	
6,292,098	B1	9/2001	Ebata	
6,356,625	B1	3/2002	Casteiani	
6,385,772	B1	5/2002	Courtney	
6,424,370	B1	7/2002	Courtney	
6,462,697	B1	10/2002	Klamer et al.	
6,476,858	B1	11/2002	Ramirez Diaz et al.	
6,504,479	B1	1/2003	Lemons	
6,522,532	B2	2/2003	Liao et al.	
6,525,761	B2	2/2003	Sato et al.	
6,549,130	B1	4/2003	Joso	
6,556,241	B1	4/2003	Yoshimura et al.	
6,570,610	B1	5/2003	Kipust	
6,628,835	B1	9/2003	Brill	
6,646,676	B1	11/2003	DeGrace	
6,662,649	B1	12/2003	Knight et al.	
6,675,386	B1	1/2004	Hendricks et al.	
6,698,021	B1	2/2004	Amini	
6,720,990	B1	4/2004	Walker et al.	
7,113,971	B1	9/2006	Ohi et al.	
7,310,072	B2	12/2007	Ronzani	
7,372,447	B1	5/2008	Jacobsen et al.	
2003/0071899	A1	4/2003	Joso	
2005/0055727	A1	3/2005	Creamer et al.	
2005/0130803	A1	6/2005	Rastegar	

FOREIGN PATENT DOCUMENTS

EP	232031	8/1987
EP	532110	3/1993
EP	209397	7/1993
EP	613109	8/1994
EP	613110	8/1994
EP	744630	11/1996
EP	785536	7/1997
EP	613111	8/1998
JP	03089691	4/1991
JP	6-301898	10/1994
JP	9-282600	10/1997
JP	HEI-10-66058	3/1998
JP	A-10-155040	6/1998
JP	9-251599	4/1999
JP	11-160424	6/1999
WO	WO90/04242	4/1990
WO	WO95/27910	10/1995
WO	WO96/12265	4/1996
WO	WO97/37336	10/1997
WO	WO98/52174	11/1998

OTHER PUBLICATIONS

Nov. 24, 1976, TELEXIS ViaNet General Information Booklet Version 1.3.
 2000, ViaNet 3000 Administrator's Manual Version 1.1- NetXpress Video by TELEXIS, Kanata, Ontario, Canada.
 1999 Vianet 3000 Operator Manual Version 1.0—NetXpress Video by TELEXIS, Kanata, Ontario, Canada.
 1999 ViaNet 3000 Administrator Manual Version 1.0—NetXpress Video by TELEXIS, Kanata, Ontario, Canada.
 1999 ViaNet 3000 Instruction Manual Operator's Revision 1—NetXpress Video by TELEXIS, Kanata, Ontario, Canada.
 Office Action issued on Oct. 4, 2007 in U.S. Appl. No. 11/617,509 (present application).

US 7,643,168 B2

Page 3

Office Action issued on Sep. 27, 2004 in U.S. Appl. No. 10/336,470
(the parent of the present application).

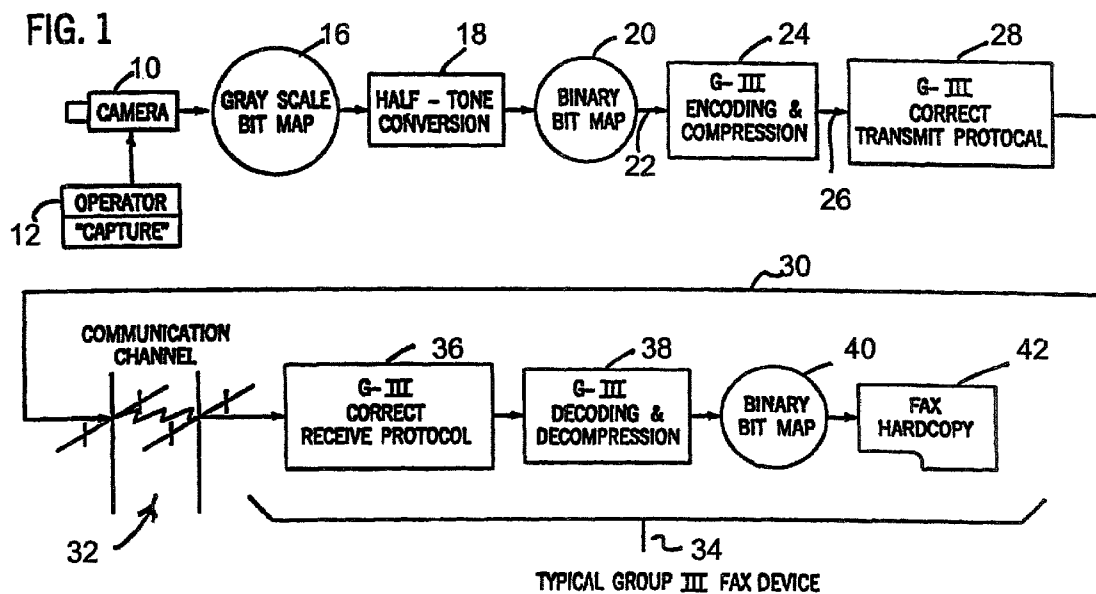
Office Action issued on Aug. 9, 2005 in U.S. Appl. No. 10/336,470
(the parent of the present application).

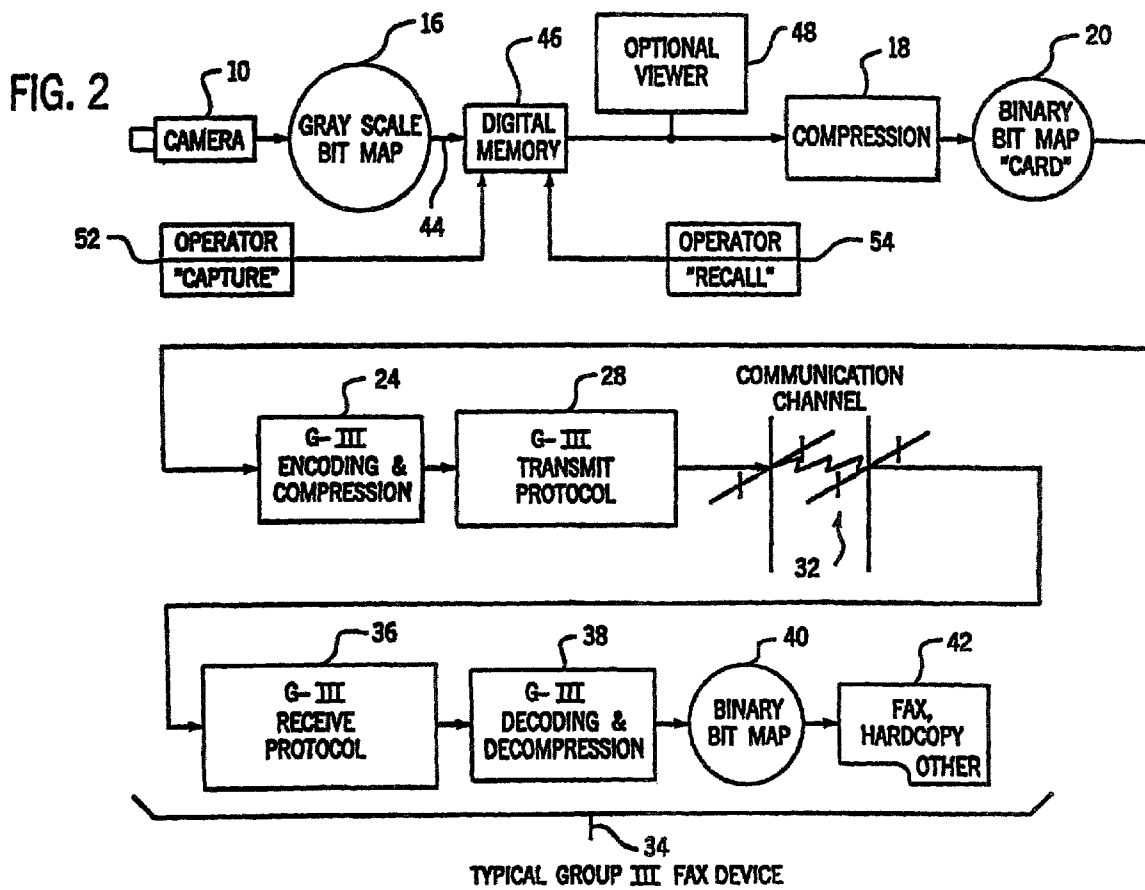
Office Action issued on Dec. 16, 2005 in U.S. Appl. No. 10/336,470
(the parent of the present application).

Office Action issued on Jul. 27, 2006 in U.S. Appl. No. 10/336,470
(the parent of the present application).

Office Action issued on Mar. 8, 2007 in U.S. Appl. No. 10/366,470
(the parent of the present application).

* cited by examiner





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