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PROVISIONAL APPLICATION FOR PATENT COVER SHEET

This is a request for filing a PROVISIONAL APPLICATION FOR PATENT under 37 CFR 1.53 (b)(2).

U.S. PTO
12/04/97

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<input checked="" type="checkbox"/> Additional inventors are being named on the <u>1</u> separately numbered sheets attached hereto					
TITLE OF THE INVENTION (280 characters max)					
INTEGRATED INTERNET CAMERA					
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ENCLOSED APPLICATION PARTS (check all that apply)					
<input checked="" type="checkbox"/> Specification Number of Pages	53	<input type="checkbox"/> Small Entity Statement			
<input checked="" type="checkbox"/> Drawing(s) Number of Sheets	14	<input type="checkbox"/> Other (specify)			
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<input checked="" type="checkbox"/> No.					
<input type="checkbox"/> Yes, the name of the U.S. Government agency and the Government contract number are: _____					

Respectfully submitted,

SIGNATURE Bruce H. Bernstein

Date 12/4/97

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(if appropriate)
Docket Number: V16223

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Docket Number	V16223	Type a plus sign (+) inside this box →	+
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Number 2 of 2



4540217 OF 25009

TITLE OF THE INVENTION

INTEGRATED INTERNET CAMERA

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20067310-120497

INTEGRATED INTERNET CAMERA

BACKGROUND OF THE INVENTION

1. Field of the Invention

5 The present invention relates to a digital camera, and more particularly, a camera capable of transmitting images over the Internet.

2. Description of Background Information

10 As the Internet (i.e., the worldwide inter-network, currently operated under TCP/IP: Transmission Control Protocol/Internet Protocol) gains more participants and becomes more consumer-oriented, the demand for simplified ways of providing access to various media increases. A large portion of the new participants seek access to the "World Wide Web" (i.e., a hypertext-driven global multimedia system, hereinafter the "Web"). Archives of digital images (photographs and motion video) are now ubiquitous. The demand for real-time or live video, whether motion video or still video, has different requirements, but has also become strong. Needs in entertainment, advertising, education, security, traffic monitoring, weather monitoring, child care monitoring, and surveillance, as well as general consumer usage, have driven the creation of an initial wave of systems able to place a real-time image, or series of images, on the Internet and on the Web.

15
20 However, the prior systems are complex and expensive, requiring the use of a general purpose personal computer and a host of peripheral devices to place an image on the Internet or Web. The systems are typically large and lack portability.

25 An example of such a prior system is shown in Fig. 1. A video camera 110 connects to a "frame grabber" peripheral card 112, hosted by the parallel bus 114 of a personal computer 122. The frame grabber card 112 decodes a frame of the analog video signal from the video camera 110 into a digital image, and makes the digital image available to purpose-designed software running on the computer 122. Typically, the purpose-designed software

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eventually compresses the digital image into main memory using the main microprocessor of the personal computer 122. In order to upload the image to the Internet, the computer 122 requires a serial port 118 and attached modem 120, which are hooked to the public telephone system 124. The personal computer 122 uses further software programs running in main memory, which include at least a modem driver, telephone transmission protocol (e.g., TCP/IP) driver, a telephone transmission protocol (e.g., PPP: Point-to-Point Protocol) driver, and an file transfer protocol (e.g., FTP: File Transfer Protocol) application, to connect to the modem 120, through the telephone system 124, and to an ISP (Internet Service Provider) 128. Thereafter, the personal computer 122 may upload the compressed image to a shell account available at the ISP 128.

Costs for such a system may run to several thousand dollars. The computer 122 must be on-site, i.e., relatively close to the camera 110, and is large and relatively immobile. Since the system is an assembly of general-purpose components, and the computer 122 is usually dedicated to serving the camera 110, the system is redundant and has excess capabilities. In particular, multiple microprocessors/controllers, power supplies, and communication lines are necessary to operate the separate parts of the system. Moreover, such systems include many opportunities for error because of the many interfaces and communication links between discrete devices. Such error may occur as difficulties in setup and configuration and incompatibility between devices in operation.

3. Acronyms

The following acronyms and abbreviations are used throughout the specification. For brevity, the definitions are summarized as follows:

xDSL	– (generic) Digital Subscriber Line
ATM	– Asynchronous Transfer Mode
CCD	– Charge Coupled Device
CCTV	– Closed Circuit Television
DNS	– Domain Naming System
DNSs	– Domain Name Server
ExCA	– Exchangeable Card Architecture

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