

EXHIBIT A

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APPLICANTS

Conditions
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 OF COLLECTION

NOTE-DISCLAIMER
 The term of this patent shall not extend beyond the expiration date of Pat. No. _____

Foreign priority claimed 35 USC 119 conditions met.	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	AS FILED	STATE OR COUNTRY	SHEETS DRWGS.	TOTAL CLAIMS	INDEP. CLAIMS	FILING FEE RECEIVED	ATTORNEY'S DOCKET NO.
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ADDRESS

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PARTS OF APPLICATION FILED SEPARATELY		20 3/30/99 [Signature] Applications Examiner	
NOTICE OF ALLOWANCE MAIL 3/30/99		CLAIMS ALLOWED Total Claims: 66 Print Claim: 47	
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FORM PTO-1267 U.S. Department of Commerce Patent and Trademark Office DISCLAIMER LABEL Application No. 08/525,897 A terminal disclaimer has been entered and recorded under 35 U.S.C. 253 in this file. DO NOT DESTROY		Assistant Examiner [Signature] Ajit Patel Primary Examiner Primary Examiner	
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A 525897

BROADBAND TELECOMMUNICATIONS SYSTEM

Cross-Reference to Related Application

This application is a continuation-in-part of prior application serial number
5 08/238,605, entitled "Method, System, and Apparatus for Telecommunications Control", filed
May 5, 1994, currently pending, and incorporated by reference into this application.

Background

At present, Asynchronous Transfer Mode (ATM) technology is being developed to
10 provide broadband switching capability. Some ATM systems have used ATM cross-connects
to provide virtual connections. Cross-connect devices do not have the capacity to process
signaling. Signaling refers to messages that are used by telecommunications networks to set-up
and tear down calls. Thus, ATM cross-connects cannot make connections on a call by call
basis. As a result, connections through cross-connect systems must be pre-provisioned. They
15 provide a relatively rigid switching fabric. Due to this limitation, ATM cross-connect systems
have been primarily used to provide dedicated connections, such as permanent virtual circuits
(PVCs) and permanent virtual paths (PVPs). But, they do not provide ATM switching on a
call by call basis as required to provide switched virtual circuits (SVCs) or switched virtual
paths (SVPs). Those skilled in the art are well aware of the efficiencies created by using
20 SVPs and SVCs as opposed to PVCs and PVPs. SVCs and SVPs utilize bandwidth more
efficiently.

ATM switches have also been used to provide PVCs and PVPs. Since PVCs and PVPs
are not established on a call-by-call basis, the ATM switch does need to use its call processing
or signaling capacity. ATM switches require both signaling capability and call processing
25 capability to provide SVCs and SVPs. In order to achieve virtual connection switching on a
call by call basis, ATM switches are being developed that can process calls in response to
signaling to provide virtual connections for each call. These systems cause problems because
they must be very sophisticated to support current networks. These ATM switches must
process high volumes of calls and transition legacy services from existing networks. An
30 example would be an ATM switch that can handle large numbers of POTS, 800, and VPN