PTO/SB/16 (08-03)

Approved for use through 07/31/2006. OMB 0651-0032 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. PROVISIONAL APPLICATION FOR PATENT COVER SHEET

This is a request for filing a PROVISIONAL APPLICATION FOR PATENT COVER SHEET

· · 🐴

DOCKE

R

Δ

Ε	xpress Mail Label No.	EV 167 295 313 US							
		INVENTO	R(S)				<u> </u>		
Given Name (first and mi	ddle (if any])	Family Name or Surname			Residence				
Robert M.		Burke			(City and either State or Foreign Co				
		Burke .		Los	Los Gatos, CA				
Additional inventors are b	eing named on the		separately n	umbered she	ets attached	hereto	0		
		LE OF THE INVENTION	· · · · · · · · · · · · · · · · · · ·						
ERVICE PREFEREN Direct all correspondence		REFOR DATA TRAFF		VISIONING	CONTRO	DL	1 U S.		
Customer Number:	· ·	23488		•					
Firm or	Gerald B. Rosenberg	Fea				•			
Address		· · ·	· • •						
Address	285 Hamilton Avenu	e				•			
City	Suite 520		State		Zip				
Country	Palo Alto	<u> </u>	Telephone			94301			
	US	SED APPLICATION PA	•	650.325.2	100	650.325.2107	,		
Orawing(s) Number of Sheets Other (specify) Application Date Sheet. See 37 CFR 1.76 METHOD OF PAYMENT OF FILING FEES FOR THIS PROVISIONAL APPLICATION FOR PATENT Applicant claims small entity status. See 37 CFR 1.27. A check or money order is enclosed to cover the filing fees. The Director is herby authorized to charge filing fees or credit any overpayment to Deposit Account Number: 50-0890 Payment by credit card. Form PTO-2038 is attached. The invention was made by an agency of the United States Government or under a contract with an agency of the United States Government.									
	e U.S. Government a	gency and the Government	contract numb	er are:	•				
[Page 1 of 2] SIGNATURE				Date <u>II /8 2003</u> REGISTRATION NO. <u>30,320</u> (<i>if appropriate</i>) Docket Number: <u>BRDB3000</u>					
TELEPHONE <u>650.325.21</u>					TENT				

USE ONLY FOR FILING A PROVISIONAL APPLICATION FOR PATENT This collection of information is required by 37 CFR 1.51. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 8 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Provisional Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

	Under the Paperwe	ork Reduction Act of 1995,	no persons are requi	reditore	spond			nd Trademark (for use through 07/31 Office; U.S. DEPART nless it displays a val	MENT OF	COMMERCE	
					Ormalata 16 Kaina							
•	FEE TRANSMITTA				Application Number N/A			er N/A				
				ľ					November 18, 2003			
		for FY 20		ľ	First	Named	Inven	tor Burke.	Robert M.			
1	Effective 10/01/2003. Patent fees are subject to annual revision.				Examiner Name N/A							
18	Applicant claims small entity status. See 37 CFR 1.27								N/A			
	TOTAL AMOUNT OF PAYMENT (\$) 80.00				Attorney Docket No. BRDB3000							
					Allon		_				$ \longrightarrow$	
C	METHOD OF PAYMENT (check all that apply)				FEE CALCULATION (continued)							
	Check Credit card Money Other None				3. ADDITIONAL FEES							
	Deposit Account:			Fee	Fee	Fee	Fee	Fee	Description			
	Deposit Account 50-0	890		Code 1051	• (\$) • 130	Code 2051			•		Fee Paid	
	Number Deposit	Teebl ow		1052	50	2051		-	e filing fee or oath e provisional filing fee	e or		
•	Account New	TechLaw					•	cover sheet				
		ized to: (check all that app	1 T	1053 1812	130 2,520	1053		Non-English sp For filing a requ	ecification lest for ex parte reex	amination		
	Charge fee(s) indica		any overpayments	1804	920*	1804			blication of SIR prior 1			
•		hal fee(s) or any underpaym	.,					Examiner action	n			
	to the above-identified of	ated below, except for the t deposit account.	niing tee	1805	1,840*	1805	1,840*	Requesting pul Examiner actio	blication of SIR after			
		EE CALCULATION		1251	110	2251	55	Extension for r	eply within first mont	h		
	1. BASIC FILING			1252	420	2252	210	Extension for r	eply within second m	onth		
	Large Entity Small En		Fee Deid	1253	950	2253		Extension for r	eply within third mon	th		
.4	F <u>ee Fee</u> Fee Fe Code (\$) Code (\$		Fee Paid	1254	1,480	2254			eply within fourth mo	· ·	· · · · ·	
	1001 770 2001 3	85 VUtility filing fee		1255	2,010	2255	1,005	Extension for r	eply within fifth mont	h	· · · · · · · · · · · · · · · · · · ·	
\$	1002 340 2002 1	70 Design filing fee		1401	330	2401		Notice of Appe				
,		65 Plant filing fee		1402	330	2402			support of an appea	d- . :		
		85 Reissue filing fee		1403	290	2403		Request for ora	-			
	1005 160 2005	80 Provisional filing fe		1451 1452	1,510 110	1451 2452			tute a public use proc /e - unavoidable	ceeding		
		SUBTOTAL (1)	\$) 80.00		1,330	2453		•	ve - unintentional		· · · ·	
	2. EXTRA CLAIM	FEES FOR UTILITY		1501		2501		Utility issue fee				
	·	Extra Claims	e from Below Fee Paid	1502	480	2502		Design issue fe				
	Total Claims	20** = └─── X └─		1503	640	2503	320	Plant issue fee	х э			
	Claims Multiple Dependent	」 - 3** = └──┘ × └──		1460	130	1460	130	Petitions to the	Commissioner			
] ¶]	1807	50	1807	50	Processing fee	under 37 CFR 1.17	(q)		
	Large Entity Small Fee Fee Fee	Fee Fee Descriptio	<u>on</u>	1806	180	1806			Information Disclosur		┝───┤┃	
	Code (\$) Code	(\$)	_	8021	40	8021	40	Recording each property (times	n patent assignment	per s)		
-	1202 18 220 1201 86 220		•	1809	770	2809	385		sion after final reject			
		· ·	nt claim, if not paid	1810	770	2810		•	(a)) ional invention to be		· · · · · ·	
•	1204 86 220	4 43 ** Reissue indepe	endent claims			2010	000	examined (37 (CFR 1.129(b))			
4 7		over original par		1801		2801		-	ontinued Examination		· ·	
· ,	1205 18 220	5 9 ** Reissue claims and over origina		1802	900	1802	900	Request for e of a design ap	xpedited examination plication	n		
		SUBTOTAL (2)	(\$)		fee (sp			-				
	SUBTOTAL (2) (Φ) **or number previously paid, if greater; For Reissues, see above			*Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$)								
Č	SUBMITTED BY				(Complete (if applicable))							
	Name (Print/Type) Gerald B. Rosenberg					tion No. Agent)	30,3	320	Telephone 650.3	25.2100 _/		
l l	Signature	Reader	Rosen						Date)	4	2003	
		WARNING: Informati			<u> </u>	ublic (Credit	card inform	ation sh uld not	++		

PTO/SB/17 (10-03)

 \hat{T}

DOCKE

Δ

R

Μ

Δ

WARKING: Information in first rm may becompublic. Credit card information should not be included on this form. Provide credit card information and auth rization on PTO-2038. This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

BNS Intellectual Property Description



BROADBAND NETWORK SYSTEMS, INC. Intellectual Property

Service Preference Architecture (SPA) Description & Technology

November 17, 2003

BNS Proprietary 11/17/2003

Page 1

BNS Intellectual Property Description

I. Service Preference Architecture	4
A. High Level Description	4
B. Service Control and Copyright Protection	4
C. Flexibility to add new Service Control and Copyright Techniques	5
II. SPA - Network & Product Architecture	5
A. General Description	
Figure 1. Service Preference Architecture	6
B. The ICP Controls Communication Gateways	
C. The ICP Controls ISP, BNS & EDC Service Deliveries	6
D. The ICP Controls are determined by Regular and Active Human Intervention	
E. ICPs Updated by Active Intervention & Multiple ICPs Deliver High Availability	7
Figure 2. Active Intervention Updates and Backup ICPs.	
III. BNS Internet Control Techniques	
A. Digital Rights Management	7
1. Conditional Denial	7
Figure 3. DRM – Conditional Denial	/
3. Packet Inspection	
4. E-Mail Server & Client Spoofing	0
Figure 4. DRM – Blocking E-Mail of Copyrighted Files	<u>د</u>
5. Denial of Service Attacks on Unlicensed "Pirate" Copyright Material Sites	ə
6. Copyright Registry	a
7. Copyrighted File Deletion	
8. Event Notification	
B. Service Initialization	
Figure 5. Service Initialization	
C. Active and Inactive Gateway Processing Control	10
Figure 6. Active and Inactive CG processing	10
D. First Portal Visibility ("First Portal")	10
Figure 7. First Portal Visibility.	11
E Advertising	11
Figure 8. Advertising Insertion.	11
F. Browser, Program Communications & URL or IP Address Access Blocking	12
Figure 9. URL or IP address Blocking	12
G. Service Applet Downloads	12
Figure 10. Service Applet Downloads	12
H. Virus Initiated Denial of Service Traffic Blocking	12
Figure 11. Virus Initiated Traffic Blocking	10
I. Law Enforcement Monitoring	10
Figure 12. Law Enforcement Monitoring	10
J. VolP Blocking	13
Figure 13. VolP Blocking	14
rigare to, von blocking.	14

BNS Proprietary 11/17/2003

Μ

R

Д

D

Α

Page 2

BNS Intellectual Property Description

ABOUT THIS DOCUMENT

This document describes BNS Product Features, Intellectual Property and Product Architecture.

CONFIDENTIAL INFORMATION

This Intellectual Property Description document is the property of Broadband Network Systems. It is proprietary information and is strictly confidential. It contains information intended only for the person(s) to whom it is transmitted. With receipt of this Intellectual Property Description document, Recipient acknowledges and agrees that: I) in the event that the recipient does not wish to pursue this matter, this document will be returned, at the address listed below as soon as possible; the recipient will not copy, fax, email, reproduce, divulge, or distribute this confidential Intellectual Property Description document, in whole or in part, without the express written consent of Broadband Network Systems; and III) all of the information contained in this document will be treated as confidential material with no less care than that afforded to your company or personal confidential material,

TRADEMARK NOTICE

BROADBAND NETWORK SYSTEMS, BROADBAND NETWORK SERVICES and the Broadband Network Logos are Trademarks of Broadband Network Systems:

CONTACT INFORMATION

Robert Burke C.E.O. 21103 Old Well Road Los Gatos, CA 95033 U.S.A. (408) 353-3573

URL: www.bbns.us

BNS Proprietary 11/17/2003

Page 3

DOCKET A L A R M



Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.