

(Rev. 03/01)

Form PTO-1595

U.S. Department of Comm Patent and Trademark

OMB No. 0651-0027 (exp. 5/31/2002) To the Honorable Commissioner of Patents and Trademarks. Please record the attached original documents or copy thereof. Name of conveying party(ies): 2. Name and address of receiving party(ies): 1-2-07 Mark R. Dale, David L. Hartman, Alan Gin, **Broadcom Corporation** Jen-chieh Chien, Anders Hebsgaard, Rocco J. Brescia, Jr., Cho-Hsin J. Wang, Alan Y. Kwentus, Dorothy D. Lin Street Address: 16215 Alton Parkway Additional name(s) of conveying party(ies) attached? □ yes ⋈ no City: Irvine State: California Zip Code: 92618 3. Nature of Conveyance: Country: U.S.A. ■ Assignment □ Merger Additional name(s) & address(es) attached? □ yes ⋈ no □ Security Agreement ☐ Change of Name □ Other Execution Date: June 5, 2002, June 8, 2002, June 6, 2002, June 6, 2002, May 17, 2002, June 5, 2002, June 12, 2002, June 24, 2002 and June 5, 2002 10,166718 4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution dates of the application are June 5, 2002, June 8, 2002, July 1, 2002, June 6, 2002, May 17, 2002, June 5, 2002, June 12, 2002, June 24, 2002, and June 28, 2002. A. Patent Application No(s). (to be assigned) B. Patent No(s). Additional numbers attached? □ ves 5. Name and address of party to whom correspondence 6. Total number of applications and patents involved: __1 concerning document should be mailed: 7. Total fee (37 C.F.R. § 3.41)......\$ 40.00 Name: Sterne, Kessler, Goldstein & Fox P.L.L.C. ☑ Enclosed Internal Address: c/o ☐ Authorized to be charged to Deposit Account Street Address: 1100 New York Ave., N.W. 8. Deposit Account Number: Suite 600 19-0036 City: Washington State: D.C. Zip Code: 20005-3934 (Attach duplicate copy of this page if paying by deposit account) DO NOT USE THIS SPACE 9. Statement and signature. To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. Chipota & Sayler July 3, 5003 Crystal D. Sayles Name of Person Signing Registration No. 44,318 Total number of pages including cover sheet, attachments and document Mail documents to be recorded with required cover sheet information to: Commissioner of Patents and Trademarks, Box Assignments Washington, D.C. 20231 SKGF_DC1:29757.1

07/09/E002 WABRHAM1 00000049 10186718

03 FC:581

PATENT REEL: 013069 FRAME: 0239

In consideration of the sum of One Dollar (\$1.00) or equivalent and other good and valuable consideration paid to each of the undersigned inventors: (1) Mark R. Dale, (2) David L. Hartman, (3) Alan Gin, (4) Jen-chieh Chien, (5) Anders Hebsgaard, (6) Rocco J. Brescia, Jr., (7) Cho-Hsin J. Wang, (8) Alan Y. Kwentus, and (9) Dorothy D. Lin, the undersigned inventors hereby sell and assign to Broadcom Corporation (the Assignee) his/her entire right, title and interest, including the right to sue for past infringement and to collect for all past, present and future damages:

check applicable box(es)

for the United States of America (as defined in 35 U.S.C. § 100),

and throughout the world,

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all application	ons thereon, in a	any and all L	etters Patent(s) therefor	, and	•

- (b) in any and all applications that claim the benefit of the patent application listed above in part (a), including continuing applications, reissues, extensions, renewals and reexaminations of the patent application or Letters Patent therefor listed above in part (a), to the full extent of the term or terms for which Letters Patents issue, and
- (c) in any and all inventions described in the patent application listed above in part (a), and in any and all forms of intellectual and industrial property protection derivable from such patent application, and that are derivable from any and all continuing applications, reissues, extensions, renewals and reexaminations of such patent application, including, without limitation, patents, applications, utility models, inventor's certificates, and designs together with the right to file applications therefor; and including the right to claim the same priority rights from any previously filed applications under the International Agreement for the Protection of Industrial Property, or any other international agreement, or the domestic laws of the country in which any such application is filed, as may be applicable;

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name.			undersigned inventor(s) on the date opposite his/he	r
Date: _	6/05/02	Signature of Inventor:	Mark R. Dale (1	l)
Date: _		Signature of Inventor:	David L. Hartman	2)
Date: _		Signature of Inventor:	Alan Gin (3	3)
Date: _		Signature of Inventor:	Jen-chieh Chien (4	l)
Date: _		Signature of Inventor:	Anders Hebsgaard (5	9)
Date: _		Signature of Inventor:	Rocco J. Brescia, Jr.))
Date: _		Signature of Inventor:	Cho-Hsin J. Wang	(
Date: _		Signature of Inventor:	Alan Y. Kwentus	3)
Date:	:10870.1	Signature of Inventor:	Dorothy D. Lin	り

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IN WITNESS WHEREOF, executed by the undersigned inventor(s) on the date opposite his/her name.

Date:	Signature of Inventor:	Mark R. Dale	(1)
Date:/3/SZ	Signature of Inventor:		(2)
Date:	Signature of Inventor:	Alan Gin	(3)
Date:	Signature of Inventor:	Jen-chieh Chien	(4)
Date:	Signature of Inventor:	Anders Hebsgaard	(5)
Date:	Signature of Inventor:	Rocco J. Brescia, Jr.	(6)
Date:	Signature of Inventor:	Cho-Hsin J. Wang	(7)
Date:	Signature of Inventor:	Alan Y. Kwentus	(8)
Date:	Signature of Inventor:	Dorothy D. Lin	(9)

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(6)	, (7)	, (8)'	and (9)	(also
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Date:		Jen-chieh Chien	(4)
Date: 05-17-02	Signature of Inventor:	Anders Hebsgaard	(5)
Date:	Signature of Inventor:	Rocco J. Brescia, Jr.	(6)
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(a) in the invo	ention(s) knov	vn as <u>Modi</u> t	fied Range	<u>Requests 1</u>	<u>Enabling</u>	<u>Bandwidth</u>
Requests and	State of Hea	ılth Reporti	ing for whic	h application	on(s) for p	atent in the
United States	of America	has (have)	been execu	ted by the	undersig	med on (1)
,	,(2)	,(3)	,(4))	,(5)	,
(6) 6-5-20	ತ≼ (7)	, (8	3)	and (9)	(also
known as Unit	ted States App	lication No.	(to be assign	<u>ned)</u> , filed (herewith).	in any and
all application	is thereon, in a	ny and all L	etters Patent	(s) therefor	, and	

- (b) in any and all applications that claim the benefit of the patent application listed above in part (a), including continuing applications, reissues, extensions, renewals and reexaminations of the patent application or Letters Patent therefor listed above in part (a), to the full extent of the term or terms for which Letters Patents issue, and
- (c) in any and all inventions described in the patent application listed above in part (a), and in any and all forms of intellectual and industrial property protection derivable from such patent application, and that are derivable from any and all continuing applications, reissues, extensions, renewals and reexaminations of such patent application, including, without limitation, patents, applications, utility models, inventor's certificates, and designs together with the right to file applications therefor; and including the right to claim the same priority rights from any previously filed applications under the International Agreement for the Protection of Industrial Property, or any other international agreement, or the domestic laws of the country in which any such application is filed, as may be applicable;

all such rights, title and interest to be held and enjoyed by the above-named Assignee, its successors, legal representatives and assigns to the same extent as all such rights, title and interest would have been held and enjoyed by the Assignor had this assignment and sale not been made.

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name.	IN WITNESS WHERE	OF, executed by the u	indersigned inventor(s) on the date opposite his/h	er
Date: _		Signature of Inventor:	Mark R. Dale	(1)
Date: _		Signature of Inventor: _	David L. Hartman	(2)
Date: _		Signature of Inventor: _	Alan Gin	(3)
Date: .		Signature of Inventor: _	Jen-chieh Chien	(4)
Date:		Signature of Inventor:	Anders Hebsgaard	<u>(</u> 5)
Date:	06/05/2002	. Signature of Inventor:	Rocco J. Brescie Jr.	(6)
				_(7)
Date:		Signature of Inventor:	Alan Y. Kwentus	_(8)
	DC1:10870.1	Signature of Inventor:	Dorothy D. Lin	_(9)

Page 2 of 2

In consideration of the sum of One Dollar (\$1.00) or equivalent and other good and valuable consideration paid to each of the undersigned inventors: (1) Mark R. Dale, (2) David L. Hartman, (3) Alan Gin, (4) Jen-chieh Chien, (5) Anders Hebsgaard, (6) Rocco J. Brescia, Jr., (7) Cho-Hsin J. Wang, (8) Alan Y. Kwentus, and (9) Dorothy D. Lin, the undersigned inventors hereby sell and assign to Broadcom Corporation (the Assignee) his/her entire right, title and interest, including the right to sue for past infringement and to collect for all past, present and future damages:

check applicable box(es)

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and throughout the world,

(a) in t	he invention(s) kno	wn as <u>Modi</u>	fied Range Rec	uests E	nabling B	andwidth
	sts and State of He					
	States of America					
	,(2)	,(3)	,(4)	-	_	` /
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known	as United States Ap	plication No.	(to be assigned)	, filed (h	nerewith),	in any and
all appl	ications thereon, in	any and all L	etters Patent(s) t	herefor,	and	,

- (b) in any and all applications that claim the benefit of the patent application listed above in part (a), including continuing applications, reissues, extensions, renewals and reexaminations of the patent application or Letters Patent therefor listed above in part (a), to the full extent of the term or terms for which Letters Patents issue, and
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(a) in th	ne invention(s)	known as <u>Mod</u>	<u>ified Range l</u>	<u>Requests I</u>	Enabling 1	<u>Bandwidth</u>
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(6)	, (7)	, (8) <u>6/24/</u>	2 and (9)	(also
known a	s United States	Application No	. (to be assign	<u>ed),</u> filed <u>(</u> 1	herewith),	in any and
all appli	cations thereon,	in any and all I	Letters Patent(s) therefor,	, and	•

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Reques	ts and State of He	alth Reporting fo	r which appl	ication(s) for	patent in the
United	States of America	has (have) been	executed by	y the unders:	igned on (1)
	,(2)	,(3)	,(4)	,(5)_	
(6)	,(2) ,(7)		aı	nd (9)	スタ/02 (also
known	as United States App	olication No. (to be	e assigned), fi	iled <u>(herewith</u>	i), 'in any and
all appl	ications thereon, in a	nv and all Letters	Patent(s) the	refor, and	

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RECORDED: 07/02/2002