## Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
Walid Ali	01/23/2008
Shankar Regunathan	02/04/2008
Guo-Wei Shieh	02/04/2008
Bruce Lin	01/25/2008
Bharath Siravara	01/29/2008
Ce Wang	01/25/2008

#### **RECEIVING PARTY DATA**

Name:	Microsoft Corporation
Street Address:	One Microsoft Way
City:	Redmond
State/Country:	WASHINGTON
Postal Code:	98052

#### PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	12026534

#### **CORRESPONDENCE DATA**

Fax Number: (425)936-7329

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 425-707-2290

Email: dbouton@microsoft.com

Correspondent Name: Dianne Bouton
Address Line 1: One Microsoft Way

Address Line 4: Redmond, WASHINGTON 98052

ATTORNEY DOCKET NUMBER: 322332.01

NAME OF SUBMITTER: Snigdhaa Talwar

500456984 PATENT REEL: 020469 FRAME: 0236

12026534

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> PATENT REEL: 020469 FRAME: 0237

PAJENT A22	MONIMENT
WE, Walid Ali, Shankar Regunathan, (	Guo-Wei Shieh, Bruce Lin, Bharath Siravara
and Ce Wang ("ASSIGNOR"), have invented sub	ject matter ("INVENTION") disclosed and/or
claimed in a patent application entitled "ENTR	OPY CODING EFFICIENCY
ENHANCEMENT UTILIZING ENERGY DISTRI	BUTION REMAPPING" ("APPLICATION"),
which:	
X   will be filed without this executed	d PATENT ASSIGNMENT. ASSIGNOR hereby
authorizes and requests. ASSIGN	EE'S legal representatives, of the Law and
authorizes and requests, persetment M	Sicrosoft Corporation, One Microsoft Way,
Corporate Allairs Department, M	tho are associated with customer number
Redmond, Washington 98032, W	esis (Application Ser. No. 12/026,534, filed
69316, to insert here in parentin	esis (Application Ser No. and filing date, when
this APPLICATION'S	Application Ser. No. and filing date, when
known;	
was filed on and was giv	en Application Ser. No
is filed concurrently herewith;	
Microsoft Corporation, a Washingto	n Corporation, on behalf of itself and its
average and assigns ("ASSIGNEE"), is entitle	ed to, and is desirous of acquiring, the entire
and exclusive rights, title and interest in the l	NVENTION and the APPLICATION (and all
other applications and patents derived therefore	rom, such as continuing applications, in and
for the United States, its territories, and all fo	reign countries ("APPLICATION
	<b>.</b>
DERIVATIVES"));  For good and valuable consideratio	n, the receipt of which is hereby
acknowledged by the ASSIGNOR, the ASSIGNO	op hereby sells, assigns and transfers to the
ASSIGNEE, the entire and exclusive rights, titl	and interest in the INVENTION and the
ASSIGNEE, the entire and exclusive rights, the	e and interest in the investment and
APPLICATION (and APPLICATION DERIVATIVES	o);
ASSIGNOR agrees to execute all ins	struments and documents required for the
making and prosecution of the APPLICATION	(and APPLICATION DERIVATIVES), TO
litigation regarding letters patent derived the	erefrom, and for the purpose of proceeding
and perfecting title to the APPLICATION (and	APPLICATION DERIVATIVES).
1-010	1.100.1
\12318	Ware
Date	Walid Ali
Date	
Date	Shankar Regunathan
Date	
	Guo-Wei Shieh

Page 1 of 2

Date

**PATENT** 

**REEL: 020469 FRAME: 0238** 

(Continued from page 1 to list additional inventors)

Date	Bruce Lin
Date	Bharath Siravara
 Date	 Ce Wang

	WE	, Walid Ali, Shankar Regunath	an, Guo-Wei Shieh, Bruce Lin, Bharath Siravara
and Ce W			subject matter ("INVENTION") disclosed and/or
claimed i	in a	patent application entitled "E	NTROPY CODING EFFICIENCY
ENHANG	CEM	ENT UTILIZING ENERGY DIS	TRIBUTION REMAPPING" ("APPLICATION"),
which:			
	X	will be filed without this exec	uted PATENT ASSIGNMENT. ASSIGNOR hereby
		authorizes and requests, ASS	IGNEE'S legal representatives, of the Law and
			t, Microsoft Corporation, One Microsoft Way,
		Redmond, Washington 9805	2, who are associated with customer number
		69316, to insert here in pare	inthesis (Application Ser. No. $\frac{12/026,534}{}$ , filed
			's Application Ser. No. and filing date, when
		known;	
		was filed on and was	given Application Ser. No
		is filed concurrently herewith	l ;
	Mi		gton Corporation, on behalf of itself and its
successo			titled to, and is desirous of acquiring, the entire
			he INVENTION and the APPLICATION (and all
			refrom, such as continuing applications, in and
			I foreign countries ("APPLICATION
DERIVAT			
	Fo	r good and valuable consider	ation, the receipt of which is hereby
			GNOR hereby sells, assigns and transfers to the
ASSIGNE	E, th	ne entire and exclusive rights,	title and interest in the INVENTION and the
		N (and APPLICATION DERIVAT	
			instruments and documents required for the
making	and	prosecution of the APPLICATI	ON (and APPLICATION DERIVATIVES), for
litigation	n reg	jarding letters patent derived	therefrom, and for the purpose of protecting
and per	fecti	ng title to the APPLICATION (a	and APPLICATION DERIVATIVES).
Date			Walid Ali
2/0	4/	2008	R L Shan 2
Date	-		Shankar Regunathan
Date			Guo-Wei Shieh
			U .

Page 1 of 2

PATENT REEL: 020469 FRAME: 0240

MS Docket No. 322332.01

## PATENT ASSIGNMENT

	(Continued from page 1	to list additional inventors)
Date		Bruce Lin
Date	<del></del>	Bharath Siravara
Date		Ce Wang

Page 2 of 2

PATENT ASSIGNMENT
WE, Walid Ali, Shankar Regunathan, Guo-Wei Shieh, Bruce Lin, Bharath Siravara
and Ce Wang ("ASSIGNOR"), have invented subject matter ("INVENTION") disclosed and/or
claimed in a patent application entitled "ENTROPY CODING EFFICIENCY
ENHANCEMENT UTILIZING ENERGY DISTRIBUTION REMAPPING" ("APPLICATION"),
which:
will be filed without this executed PATENT ASSIGNMENT. ASSIGNOR hereby
[X] Will be filed without this executed PATEIN Assistance 1

TI III II ICELIA	<b>D211</b>	
which:		
X	authorizes and requests Corporate Affairs Depar Redmond, Washington 9 69316, to insert here in 02/05/2008 ) this APPLICA	executed PATENT ASSIGNMENT. ASSIGNOR hereby ASSIGNEE'S legal representatives, of the Law and ment, Microsoft Corporation, One Microsoft Way, 8052, who are associated with customer number parenthesis (Application Ser. No. 12/026,534, filed TION's Application Ser. No. and filing date, when
ومعمنو	known;	Augliustian Con No
		was given Application Ser. No
	is filed concurrently her	ewith; ashington Corporation, on behalf of itself and its
and exclusive other application the United DERIVATIVES FOR ASSIGNEE, to APPLICATION A making and litigation re-	e rights, title and interestations and patents derived States, its territories, as (5")); or good and valuable coned by the ASSIGNOR, the ne entire and exclusive right (and APPLICATION DERESTION APPLICATION DERESTION APPLICATION DERESTION APPLICATION APPLICATION DERESTION APPLICATION DERESTION APPLICATION	is entitled to, and is desirous of acquiring, the entire in the INVENTION and the APPLICATION (and all d therefrom, such as continuing applications, in and all foreign countries ("APPLICATION sideration, the receipt of which is hereby ASSIGNOR hereby sells, assigns and transfers to the ghts, title and interest in the INVENTION and the IVATIVES); te all instruments and documents required for the CATION (and APPLICATION DERIVATIVES), for rived therefrom, and for the purpose of protecting ON (and APPLICATION DERIVATIVES).
Date		Walld Ali
Date		Shankar Regunathan
2/4/02 Date	<u>}'</u>	Guo-Wei Shieh

Page 1 of 2

PATENT REEL: 020469 FRAME: 0242

MS Docket No. 322332.01

## PATENT ASSIGNMENT

(Continued from page 1 to list additional inventors)

Date	Bruce Lin
Date	Bharath Siravara
Date	Ce Wang

	man, Guo-Wei Shien, Bruce Lin, Bharath Siravara
	d subject matter ("INVENTION") disclosed and/or
claimed in a patent application entitled "	
ENHANCEMENT UTILIZING ENERGY D	ISTRIBUTION REMAPPING" ("APPLICATION"),
which:	
🗵 will be filed without this exe	cuted PATENT ASSIGNMENT. ASSIGNOR hereby
authorizes and requests, A	SSIGNEE'S legal representatives, of the Law and
Corporate Affairs Departme	ent, Microsoft Corporation, One Microsoft Way,
Redmond, Washington 980	52, who are associated with customer number
69316, to insert here in pa	renthesis (Application Ser. No. $\frac{12/026,534}{}$ , filed
	N's Application Ser. No. and filing date, when
known;	
was filed on and wa	s given Application Ser. No;
is filed concurrently herewi	
•	ington Corporation, on behalf of itself and its
•	entitled to, and is desirous of acquiring, the entire
•	the INVENTION and the APPLICATION (and all
<del>-</del>	erefrom, such as continuing applications, in and
for the United States, its territories, and	
DERIVATIVES"));	
* * *	ration, the receipt of which is hereby
<del>-</del>	ICNOR hereby sells, assigns and transfers to the
	title and interest in the INVENTION and the
APPLICATION (and APPLICATION DERIVA	1
·	Instruments and documents required for the
<del>-</del>	ION (and APPLICATION DERIVATIVES), for
	therefrom, and for the purpose of protecting
and perfecting title to the APPLICATION (	- <del> </del>
and perfecting the to the ATTENANTON	
Date	Walid Ali
buce	Viana i iii
Date	Shankar Regunathan
Date	Guo-Wei Shieh

Page 1 of 2

**PATENT** 

**REEL: 020469 FRAME: 0244** 

(Continued from page 1 to list additional inventors)

01/25/2008

Date

Date

1/25/2008

Date

Cluss:

Bruce Lin

Bharath Siravara

Ce Wang

REEL: 020469 FRAME: 0245

WE, Walid Ali, Shankar Regunathan, Guo-Wei Shieh, Bruce Lin, Bharath Siravara and Ce Wang ("ASSIGNOR"), have invented subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "ENTROPY CODING EFFICIENCY ENHANCEMENT UTILIZING ENERGY DISTRIBUTION REMAPPING" ("APPLICATION"), which:

X	authorizes and requests, ASSIGNE Corporate Affairs Department, Mi Redmond, Washington 98052, wh 69316, to insert here in parenthe	PATENT ASSIGNMENT. ASSIGNOR hereby EE'S legal representatives, of the Law and crosoft Corporation, One Microsoft Way, no are associated with customer number sis (Application Ser. No. 12/026,534, filed pplication Ser. No. and filing date, when
	was filed on and was give	en Application Ser. No;
	is filed concurrently herewith;	
Mi	crosoft Corporation, a Washington	Corporation, on behalf of itself and its
		d to, and is desirous of acquiring, the entire
	_	VENTION and the APPLICATION (and all
	•	om, such as continuing applications, in and
for the Unite DERIVATIVES	ed States, its territories, and all fore	eign countries ("APPLICATION
	or good and valuable consideration	the receipt of which is hereby
	<del>-</del>	R hereby sells, assigns and transfers to the
•		and interest in the INVENTION and the
	N (and APPLICATION DERIVATIVES);	
AS	SSIGNOR agrees to execute all instr	uments and documents required for the
making and	prosecution of the APPLICATION (a	and APPLICATION DERIVATIVES), for
litigation reg	garding letters patent derived there	from, and for the purpose of protecting
and perfectir	ng title to the APPLICATION (and A	PPLICATION DERIVATIVES).
 Date		Walid Ali
Date		wand An
Date		Shankar Regunathan
 Date		Guo-Wei Shieh

Page 1 of 2

MS Docket No. 322332.01

#### **PATENT ASSIGNMENT**

(Continued from page 1 to list additional inventors)

Date 1/29/2008	Bruce Lin
Date	Bharath Siravara
 Date	 Ce Wang