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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Matthew J. Warren	01/05/2010
Mads Torgersen	01/05/2010
Neal M. Gafter	12/28/2009
Jared Parsons	12/29/2009
David N. Schach	12/30/2009
Peter Golde	12/29/2009
Karen Liu	12/29/2009
Renaud Paquay	01/05/2010
Kevin Pilch-Bisson	01/04/2010
Avner Y. Aharoni	12/27/2009
Aleksey V. Tsingauz	12/30/2009

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:	12683445

CORRESPONDENCE DATA

501334872

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REEL: 025215 FRAME: 0552

PATENT

Address Line 1: One Microsoft Way Address Line 2: Patent Group Docketing Dept Redmond, WASHINGTON 98052 Address Line 4: ATTORNEY DOCKET NUMBER: 328252.01 NAME OF SUBMITTER: Gopal Sharma Total Attachments: 20 source=328252-01-Executed-Assignment#page1.tif source=328252-01-Executed-Assignment#page2.tif source=328252-01-Executed-Assignment#page3.tif source=328252-01-Executed-Assignment#page4.tif source=328252-01-Executed-Assignment#page5.tif source=328252-01-Executed-Assignment#page6.tif source=328252-01-Executed-Assignment#page7.tif source=328252-01-Executed-Assignment#page8.tif source=328252-01-Executed-Assignment#page9.tif source=328252-01-Executed-Assignment#page10.tif source=328252-01-Executed-Assignment#page11.tif source=328252-01-Executed-Assignment#page12.tif source=328252-01-Executed-Assignment#page13.tif source=328252-01-Executed-Assignment#page14.tif source=328252-01-Executed-Assignment#page15.tif source=328252-01-Executed-Assignment#page16.tif source=328252-01-Executed-Assignment#page17.tif source=328252-01-Executed-Assignment#page18.tif

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PATENT REEL: 025215 FRAME: 0553

I/WE, Matthew J. Warren, Avner Y. Aharoni, Mads Torgersen, Renaud Paquay, Neal M. Gafter, Jared Parsons, David N. Schach, Aleksey V. Tsingauz, Peter Golde, Kevin Pilch-Bisson and Karen Liu ("ASSIGNOR"), have invented subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "EFFICIENT IMMUTABLE SYNTAX REPRESENTATION WITH INCREMENTAL CHANGE" ("APPLICATION"), which:

	will be filed without this executed PATENT ASSIGNMENT. ASSIGNOR
	hereby authorizes, and requests, ASSIGNEE'S legal representatives, of
	the Law and Corporate Affairs Department, Microsoft Corporation, One
	Microsoft Way, Redmond, Washington 98052, who are associated with
	customer number 69316, to insert here in parenthesis (Application No.
	, filed) this APPLICATION's Application No. and
	filing date, when known;
\checkmark	was filed on _07-JAN-2010 and was given Application No. 12/683445
_	is filed concurrently herewith;

Microsoft Corporation, a Washington Corporation, on behalf of itself and its successors and assigns ("ASSIGNEE"), is entitled to, and is desirous of acquiring, the entire and exclusive rights, title and interest in the INVENTION and the APPLICATION (and all other applications and patents derived therefrom, such as continuing applications, in and for the United States, its territories, and all foreign countries ("APPLICATION DERIVATIVES"));

For good and valuable consideration, the receipt of which is hereby acknowledged by the ASSIGNOR, the ASSIGNOR hereby sells, assigns and transfers to the ASSIGNEE, the entire and exclusive rights, title and interest in the INVENTION and the APPLICATION (and APPLICATION DERIVATIVES);

ASSIGNOR agrees to execute all instruments and documents required for the making and prosecution of the APPLICATION (and APPLICATION DERIVATIVES), for litigation regarding letters patent derived therefrom, and for the purpose of protecting and perfecting title to the APPLICATION (and APPLICATION DERIVATIVES).

Matthew of Warran Inventor's Signature	1-5-2010 Date
Matthew J. Warren	Printed Name in Native Language (if other than English)
Inventor's Signature	Date
Avner Y. Aharoni	Printed Name in Native Language (if other than English)
Inventor's Signature	JAN 5 2010 Date
Mads Torgersen	Printed Name in Native Language (if other than English)
Inventor's Signature	Date
Renaud Paquay	Printed Name in Native Language (if other than English)

Aleksey V. Tsingauz

PATENT ASSIGNMENT

MS Docket No.: 328252.01 Inventor's Signature Date 12/28/2009 Neal M. Gafter Printed Name in Native Language (if other than English) Inventor's Signature Date Jared Parsons Printed Name in Native Language (if other than English) Inventor's Signature Date David N. Schach Printed Name in Native Language (if other than English) Inventor's Signature Date

Page 3 of 4

PATENT

Printed Name in Native Language (if

other than English)

REEL: 025215 FRAME: 0556

Inventor's Signature	Date
Peter Golde	Printed Name in Native Language (if other than English)
Inventor's Signature	Date
Kevin Pilch-Bisson	Printed Name in Native Language (if other than English)
Inventor's Signature	Date
Karen Liu	Printed Name in Native Language (if other than English)

REEL: 025215 FRAME: 0557

I/WE, Matthew J. Warren, Avner Y. Aharoni, Mads Torgersen, Renaud Paquay, Neal M. Gafter, Jared Parsons, David N. Schach, Aleksey V. Tsingauz, Peter Golde, Kevin Pilch-Bisson and Karen Liu ("ASSIGNOR"), have invented subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "EFFICIENT IMMUTABLE SYNTAX REPRESENTATION WITH INCREMENTAL CHANGE" ("APPLICATION"), which:

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Inventor's Signature Date Printed Name in Native Language (if Matthew J. Warren other than English) Date Inventor's Signature Printed Name in Native Language (if Avner Y. Aharoni other than English) Inventor's Signature Date Printed Name in Native Language (if Mads Torgersen other than English) Date Inventor's Signature Printed Name in Native Language (if Renaud Paquay other than English)

Page 2 of 4

MS Docket No.: <u>328252.01</u>

Inventor's Signature Date Printed Name in Native Language (if Neal M. Gafter other than English) Inventor's Mgnature Date arsons Printed Name in Native Language (if Jared Parsons other than English) Inventor's Signature Printed Name in Native Language (if David N. Schach other than English) Inventor's Signature Date Printed Name in Native Language (if Aleksey V. Tsingauz other than English)

MS Docket No.: <u>328252.01</u>

Mul Jull Inventor's Signature	12/29/2009 Date
0.11	
Peter Golde	
Peter Golde	Printed Name in Native Language (if other than English)
	·
Inventor's Signature	Date
Kevin Pilch-Bisson	Printed Name in Native Language (if
	other than English)
Hauring Inventor's Signature	12/29/200 9 Date
Karen Liv	
Karen Liu	Printed Name in Native Language (if
Tacell LIM	other than English)

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MS Docket No.: 328252.01

PATENT ASSIGNMENT

Inventor's Signature Date Matthew J. Warren Printed Name in Native Language (if other than English) Inventor's Signature Date Avner Y. Aharoni Printed Name in Native Language (if other than English) Inventor's Signature Date Mads Torgersen Printed Name in Native Language (if other than English) 1/5/2010 Inventor's Signature Date REMAND PARUAY Renaud Paquay Printed Name in Native Language (if other than English)

REEL: 025215 FRAME: 0563

MS Docket No.: 328252.01

PATENT ASSIGNMENT

Inventor's Signature	Date
Neal M. Gafter	Printed Name in Native Language (if other than English)
Inventor's Signature	Date
Jared Parsons	Printed Name in Native Language (if other than English)
Inventor's Signature	
inventor's signature	Date
David N. Schach	Printed Name in Native Language (if other than English)
nventor's Signature	Date
Aleksey V. Tsingauz	Printed Name in Native Language (if other than English)

Page 3 of 4

PATENT REEL: 025215 FRAME: 0564

MS Docket No.: 328252.01

PATENT ASSIGNMENT

Inventor's Signature	Date
Peter Golde	Printed Name in Native Language (if other than English)
Inventor's Signature	Date
Kevin Pilch-Bisson	Printed Name in Native Language (if other than English)
Inventor's Signature	Date
Karen Liu	Printed Name in Native Language (if other than English)

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Inventor's Signature	Date
Matthew J. Warren	Printed Name in Native Language (if other than English)
Inventor's Signature	Date
Avner Y. Aharoni	Printed Name in Native Language (if other than English)
Inventor's Signature	Date
Mads Torgersen	Printed Name in Native Language (if other than English)
Inventor's Signature	Date
Renaud Paquay	Printed Name in Native Language (if other than English)

Page 2 of 4

Inventor's Signature	Date
Neal M. Gafter	Printed Name in Native Language (if other than English)
Inventor's Signature	Date
Jared Parsons	Printed Name in Native Language (if other than English)
Inventor's Signature	Date
David N. Schach	Printed Name in Native Language (if other than English)
nventor's Signature	Date
Aleksey V. Tsingauz	Printed Name in Native Language (if other than English)

Page 3 of 4

Inventor's Signature	Date
Peter Golde	Printed Name in Native Language (if other than English)
M. P.L. Inventor's Signature	V4/2010 Date
Kevin Pilch–Bisson	Printed Name in Native Language (if other than English)
Inventor's Signature	Date
Karen Liu	Printed Name in Native Language (if

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Page 1 of 4

PATENT REEL: 025215 FRAME: 0570

Inventor's Signature	Date
Matthew J. Warren	Printed Name in Native Language (if other than English)
Inventor's Signature	
Avner Y. Aharoni	Printed Name in Native Language (if other than English)
Inventor's Signature	 Date
Mads Torgersen	Printed Name in Native Language (if other than English)
Inventor's Signature	

other than English)

MS Docket No.: 328252.01 PATENT ASSIGNMENT Inventor's Signature Date Printed Name in Native Language (if Neal M. Cafter other than English) Inventor's Signature Date Printed Name in Native Language (if Jarred Parsons other than English) Inventor's Signature Date Printed Name in Native Language (if David N. Schach other than English)

Inventor's Signature

ALEKSEY TSINGAMZ

Aleksey V. Tsingauz

12/30/2000

Date

MEKCEW LUHTAY3

Printed Name in Native Language (if other than English)

Inventor's Signature	Date
Peter Golde	Printed Name in Native Language (if other than English)
Inventor's Signature	Date
Kevin Pilch-Bisson	Printed Name in Native Language (if other than English)
Inventor's Signature	Date
Karen Liu	Printed Name in Native Language (if

RECORDED: 10/29/2010