US008055907B2

(12) **United States Patent**
Deem et al.

(10) **Patent No.: US 8,055,907 B2**
(45) **Date of Patent: Nov. 8, 2011**

(54) **PROGRAMMING INTERFACE FOR A COMPUTER PLATFORM**

(75) Inventors: **Michael E. Deem**, Redmond, WA (US); **Michael J. Pizzo**, Bellevue, WA (US); **John Patrick Thompson**, Seattle, WA (US); **Denise L. Chen**, Bellevue, WA (US); **Alexander Vaschillo**, Redmond, WA (US); **Bekim Demiroski**, Redmond, WA (US); **Srinivasmurthy P. Acharya**, Sammamish, WA (US); **Robert T. Whitney**, Seattle, WA (US)

(73) Assignee: **Microsoft Corporation**, Redmond, WA (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 1566 days.

(21) Appl. No.: **10/693,804**

(22) Filed: **Oct. 24, 2003**

(65) **Prior Publication Data**

US 2005/0091671 A1 Apr. 28, 2005

(51) **Int. Cl.**

G06F 12/14	(2006.01)
H04L 29/06	(2006.01)
G06F 9/44	(2006.01)
G06F 9/45	(2006.01)
G06F 3/00	(2006.01)

(52) **U.S. Cl.** **713/187**; 726/1; 726/3; 726/6; 713/165; 713/167; 713/193; 711/100; 711/117; 717/108; 717/116; 717/120; 717/146; 717/147; 719/328

(58) **Field of Classification Search** 713/187, 713/165, 167; 717/120, 146; 719/328
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

5,497,339	A *	3/1996	Bernard	708/109
6,161,125	A *	12/2000	Traversat et al.	709/203
6,189,055	B1 *	2/2001	Eisele et al.	710/62
6,389,129	B1 *	5/2002	Cowan	379/221.03
6,446,253	B1 *	9/2002	Mellmer	717/100
6,715,147	B1 *	3/2004	Barker	719/315
7,089,560	B1 *	8/2006	Uhler et al.	719/311
7,305,677	B2 *	12/2007	Marcey et al.	719/310
7,574,464	B2 *	8/2009	Hitz et al.	707/999.205
7,581,172	B2 *	8/2009	Ozzie et al.	715/234
2001/0005848	A1 *	6/2001	Haverstock et al.	707/1
2002/0059425	A1	5/2002	Belfiore et al.	
2002/0133809	A1 *	9/2002	Hills	717/136
2002/0152267	A1 *	10/2002	Lennon	709/203
2002/0161855	A1 *	10/2002	Manczak et al.	709/219
2002/0183044	A1 *	12/2002	Blackwell et al.	455/412
2002/0194200	A1 *	12/2002	Flank et al.	707/104.1
2003/0009694	A1 *	1/2003	Wenocur et al.	713/201

(Continued)

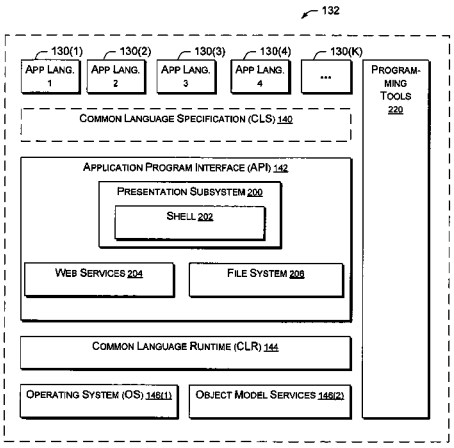
OTHER PUBLICATIONS

Butler et al, 2002, School of Computer Science and Software Engineering Monash University, A Formalization of the Common Type System and CLS Rules of ECMA Standard 335: "Common Language Infrastructure".*

(Continued)

Primary Examiner — Edan Orgad
Assistant Examiner — Jenise Jackson
(74) *Attorney, Agent, or Firm* — Lee & Hayes, PLLC

(57) **ABSTRACT**

A programming interface for a computer platform can include various functionality. In certain embodiments, the programming interface includes one or more of the following groups of types or functions: those related to core file system concepts, those related to entities that a human being can contact, those related to documents, those common to multiple kinds of media, those specific to audio media, those specific to video media, those specific to image media, those specific to electronic mail messages, and those related to identifying particular locations.

54 Claims, 10 Drawing Sheets