(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
20 September 2007 (20.09.2007)

PCT

(10) International Publication Number
WO 2007/106211 A1

(51) International Patent Classification:
G06F 15/16 (2006.01) *G06F 17/00* (2006.01)

(21) International Application Number:
PCT/US2007/001101

(22) International Filing Date: 16 January 2007 (16.01.2007)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
11/375,961 15 March 2006 (15.03.2006) US

(71) Applicant *(for all designated States except US)*: **MICROSOFT CORPORATION** [US/US]; One Microsoft Way, Redmond, Washington 98052-6399 (US).

(72) Inventors: **PARSONS, John E.**; One Microsoft Way, Redmond, Washington 98052-6399 (US). **CHIK, Joy**; One Microsoft Way, Redmond, Washington 98052-6399 (US). **ABDO, Nadim Y.**; One Microsoft Way, Redmond, Washington 98052-6399 (US). **SCHMIEDER, Robert Wilhelm**; One Microsoft Way, Redmond, Washington 98052-6399 (US).

(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

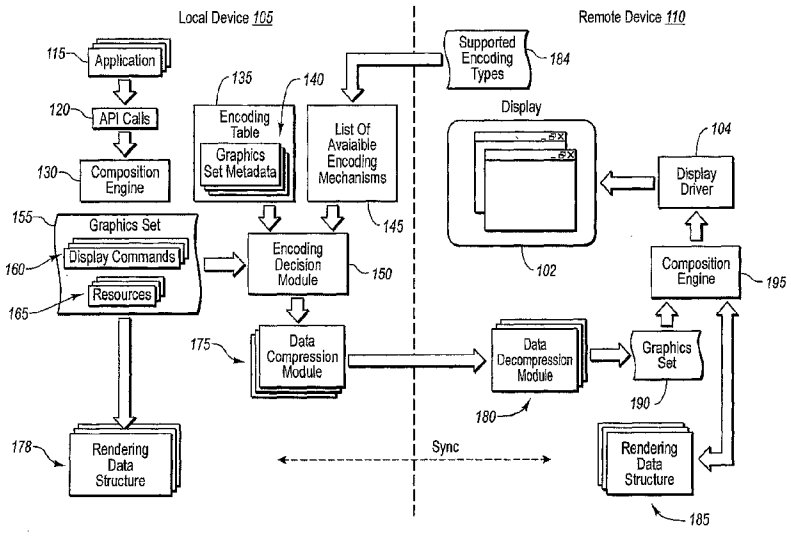
(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:
— *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*
— *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

Published:
— *with international search report*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) **Title:** EFFICIENT ENCODING OF ALTERNATIVE GRAPHIC SETS



(57) **Abstract:** Embodiments provide for efficient encoding and rendering of remote graphic displays by applying one or more of the following: (1) field encoding for identifying fields of a graphics set such that commonalities of various fields across different graphics languages are identified; (2) resource caching, which treats heterogeneous resources in a homogeneous way when it comes to storing them; (3) determining the type of encoding for remoting items within a graphics set based upon the types of compression mechanisms supported by a remote device; (4) improving responsiveness by rendering with partially sent resources; (5) a mechanism for determining what portions (if any) of a graphics set should be sent to a remote device and in what order; and (6) use of dedicated resources already on a remote device in order to eliminate the transfer of a resource between a local device and the remote device when rendering such resource.

WO 2007/106211 A1