

US006496793B1

(12) United States Patent

Veditz et al.

(10) Patent No.: U

US 6,496,793 B1

(45) Date of Patent:

Dec. 17, 2002

(54) SYSTEM AND METHODS FOR NATIONAL LANGUAGE SUPPORT WITH EMBEDDED LOCALE-SPECIFIC LANGUAGE DRIVER IDENTIFIERS

(75) Inventors: Daniel Paul Veditz, Felton, CA (US);
David Brett Schnepper, Los Gatos, CA

(US)

(73) Assignee: **Borland Software Corporation**, Scotts Valley, CA (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35

U.S.C. 154(b) by 0 days.

(21) Appl. No.: 08/050,957

(22) Filed: Apr. 21, 1993

(51) Int. Cl.⁷ G06F 17/20; G06F 9/44

(56) References Cited

U.S. PATENT DOCUMENTS

4,456,969	A	*	6/1984	Herzik et al.	
4,566,078	A	*	1/1986	Crabtree	364/419.01
4,731,735	A	*	3/1988	Borgendale et al	364/419.16
4,870,402	Α	ø	9/1989	DeLuca et al	364/419.16
5,119,465	A	*	6/1992	Jack et al.	

5,181,162 A * 1/1993 Smith et al. 5,280,575 A * 1/1994 Young et al.

OTHER PUBLICATIONS

Hall, W., Adapt Your Program for Worldwide Use with Windows Internationalization Support, Microsoft Systems Journal, Nov./Dec. 1991, pp. 29–58. Petzold, C., Programming Windows, Second Edition, 1990, pp. 125–131 (Chapter 3: The Keyboard).

* cited by examiner

Primary Examiner—Patrick N. Edouard (74) Attorney, Agent, or Firm—Darby & Darby

(57) ABSTRACT

The present invention comprises a National Language Support (NLS) system with Language Driver Identifiers (LDIDs) embedded as locale-specific descriptors within data objects. The Identifiers, which may be in the form of a system-comparable ID (e.g., ID byte), are employed by the system in several places to record the particular language (driver) which was used when a given data object was created or modified. The LDID methodology of the present invention allows the system to intelligently process data objects created or modified under one language driver with those created or modified by a different language driver. In the event of incompatibilities, the system provides error handling routines, including a preferred interface for warning users of incompatibilities and receiving user choices in response thereof.

31 Claims, 13 Drawing Sheets



100

Dec. 17, 2002

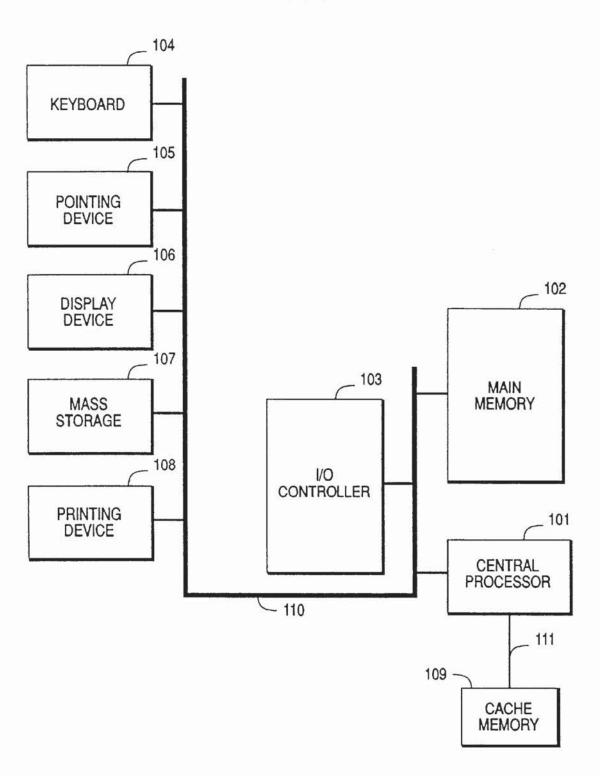


FIG. 1A



Dec. 17, 2002

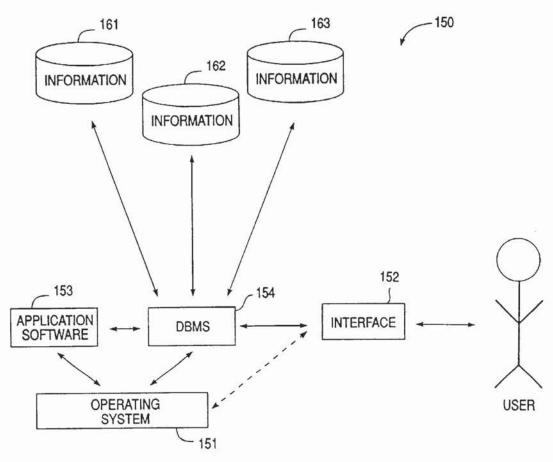


FIG. 1B

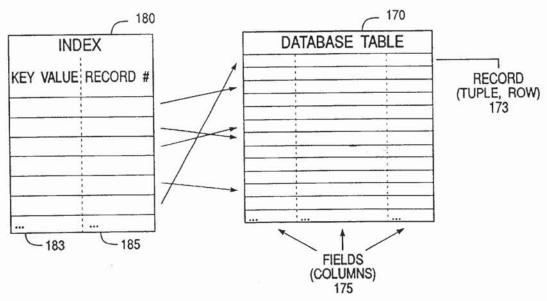
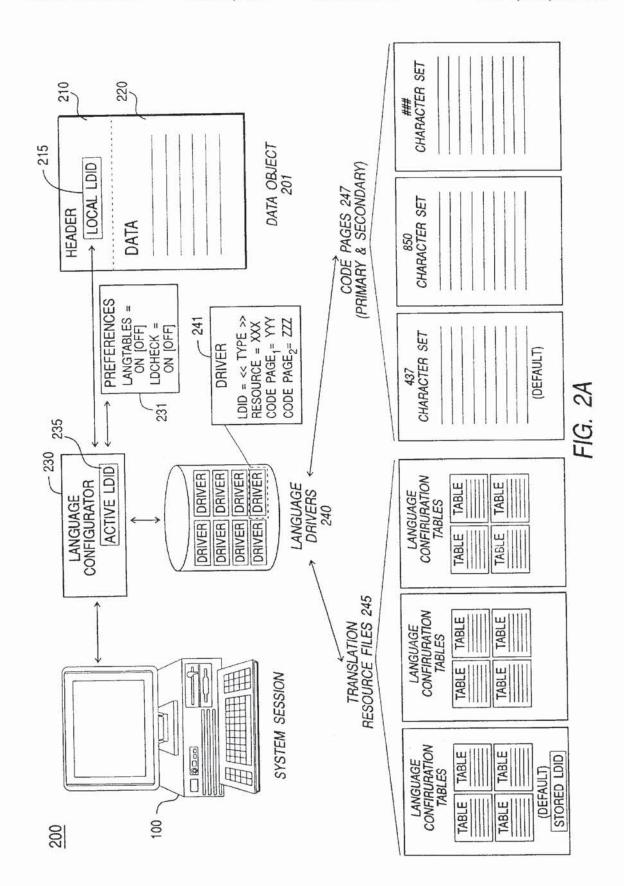


FIG. 1C



LANGUAGE DRIVER MATCHING

LOCAL DATA

RESULT: LANGUAGE DRIVER MATCH ACTION: NONE ACTIVE LDID = LOCAL LDID

(e.g., DATABASE TABLE IN ENGLISH)

(e.g., SYSTEM SET TO ENGLISH)

Dec. 17, 2002

FOREIGN DATA

RESULT: ACTION: ACTIVE LDID ≠ LOCAL LDID

(e.g., SYSTEM SET TO ENGLISH)

(e.g., DATABASE TABLE IN DANISH)

LANGUAGE DRIVER MISMATCH
(1) CHANGE ACTIVE LDID TO LOCAL LDID;
(2) MAP LOCAL LDID INTO ACTIVE LDID;
(3) IGNORE; or
(4) ABORT



DOCKET

Explore Litigation Insights



Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time** alerts and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.

