



United States Patent [19]

DeLorme et al.

[11] Patent Number: **5,948,040**

[45] Date of Patent: **Sep. 7, 1999**

- [54] **TRAVEL RESERVATION INFORMATION AND PLANNING SYSTEM**
- [75] Inventors: **David M. DeLorme**, Yarmouth; **Keith A. Gray**, Dresden; **T. Angus Ferguson**, Portland, all of Me.
- [73] Assignee: **DeLorme Publishing Co.**, Yarmouth, Me.
- [21] Appl. No.: **08/797,471**
- [22] Filed: **Feb. 6, 1997**

Related U.S. Application Data

- [63] Continuation-in-part of application No. 08/661,600, Jun. 11, 1996, Pat. No. 5,802,492, which is a continuation-in-part of application No. 08/381,214, Jan. 31, 1995, Pat. No. 5,559,707, which is a continuation-in-part of application No. 08/265,327, Jun. 24, 1994, and a continuation-in-part of application No. 08/521,828, Aug. 31, 1995.
- [51] **Int. Cl.⁶** **G06F 19/00; G01C 21/00**
- [52] **U.S. Cl.** **701/201; 701/208; 701/211; 340/990; 705/5**
- [58] **Field of Search** **701/201, 202, 701/207, 208, 209, 211, 212, 213; 705/5, 6; 340/988, 989, 990, 995**

References Cited

U.S. PATENT DOCUMENTS

4,359,631	11/1982	Lockwood et al.	360/12
4,862,357	8/1989	Ahlstrom et al.	705/6
4,926,336	5/1990	Yamada	364/444
5,021,953	6/1991	Webber et al.	705/6
5,172,321	12/1992	Ghaem et al.	701/202
5,191,523	3/1993	Whitesage	705/6
5,208,756	5/1993	Song	364/449

(List continued on next page.)

OTHER PUBLICATIONS

- Makulowich, John, "Traveling by Virtual Reservation," Washington Technology, Jan. 23, 1997, p. 42.
- Knecht, Bruce, G., "Microsoft Puts Newspapers in Highanxiety.com," The Wall Street Journal, Jul. 15, 1996, pp. B1, B10.

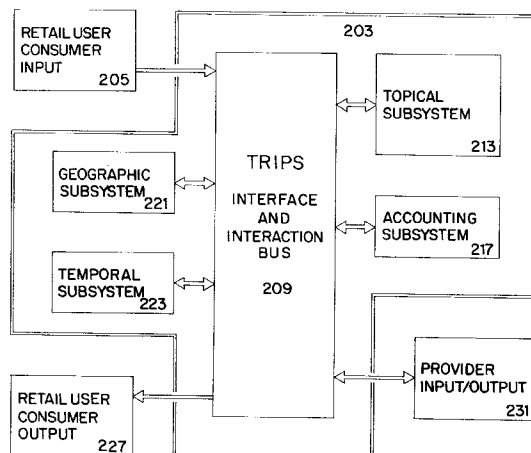
- "InforTravel Expands Service," Business Geographics, vol. 4, No. 6, Jun., 1996, p. 13.
- DeL Rosso, Laura, "Firm Customizes Internet Res Link," Travel Weekly, vol. 55, No. 26, Apr. 1, 1996, pp. 43-44, 47.
- "Casto Travel's Resource Library," www.casto.com.
- "Sunnyside Computing, Inc.," www.itn.net.

Primary Examiner—Tan Nguyen
Attorney, Agent, or Firm—Pierce Atwood; Chris A. Caseiro

[57] ABSTRACT

Computerized travel reservation information and planning system that generates "map ticket" output in various media, for guidance and transactions en route. Such print or electronic documents can include bar or alphanumeric codes for automated recognition and/or access. WHERE?, WHO/WHAT?, WHEN? and HOW? menus enable flexible user inquiries accessing selectable geographic, topical, temporal and transactional data records and relational processing. Sub-menus provide further capabilities: e.g. routing, topical searching; searches of events calendars, almanacs, appointment books, related itinerary scheduling; trip budgeting issues, plus travel arrangement availabilities or other goods/services offers. Online communications links access updated or supplemental information on places, times, topics and other provider goods/service offers. Online computer-aided routing system enables input of selectable travel origin, destination, and waypoints to compute travel routes, available transportation services, costs, options, and schedules. A point-of-interest database lets users pick types of attractions or accommodations within a user-selected region around routes of travel. Users engage in an iterative planning process, revising or editing travel plans, previewing travel-logs of alternate routes, selecting point of interest parameters, comparing times and costs of transportation options, in order to achieve a satisfactory travel plan. The system provides printed or electronic output that may include any one or more of text itinerary, ordered set of travel maps, customized collection of information on points of interest information and a selected array of valid reservation confirmations, tickets and/or discount coupons coded with elements for automated recognition and processing. Mobile users, including GPS-linked users, can access the system via wireless communication units.

80 Claims, 14 Drawing Sheets



U.S. PATENT DOCUMENTS

5,231,584	7/1993	Nimura et al.	364/444	5,359,527	10/1994	Takanabe et al.	364/449
5,237,499	8/1993	Garback	705/5	5,369,588	11/1994	Hayami et al.	701/209
5,243,528	9/1993	Lefebvre	701/211	5,422,809	6/1995	Griffin et al.	705/5
5,253,166	10/1993	Dettebach et al.	705/5	5,444,618	8/1995	Seki et al.	364/420
5,272,638	12/1993	Martin et al.	701/202	5,519,619	5/1996	Seda	701/201
5,331,546	7/1994	Webber et al.	705/6	5,537,324	7/1996	Nimura et al.	364/449
5,353,034	10/1994	Sato et al.	340/988	5,587,911	12/1996	Asano et al.	364/444.2
				5,724,520	3/1998	Goheen	705/5

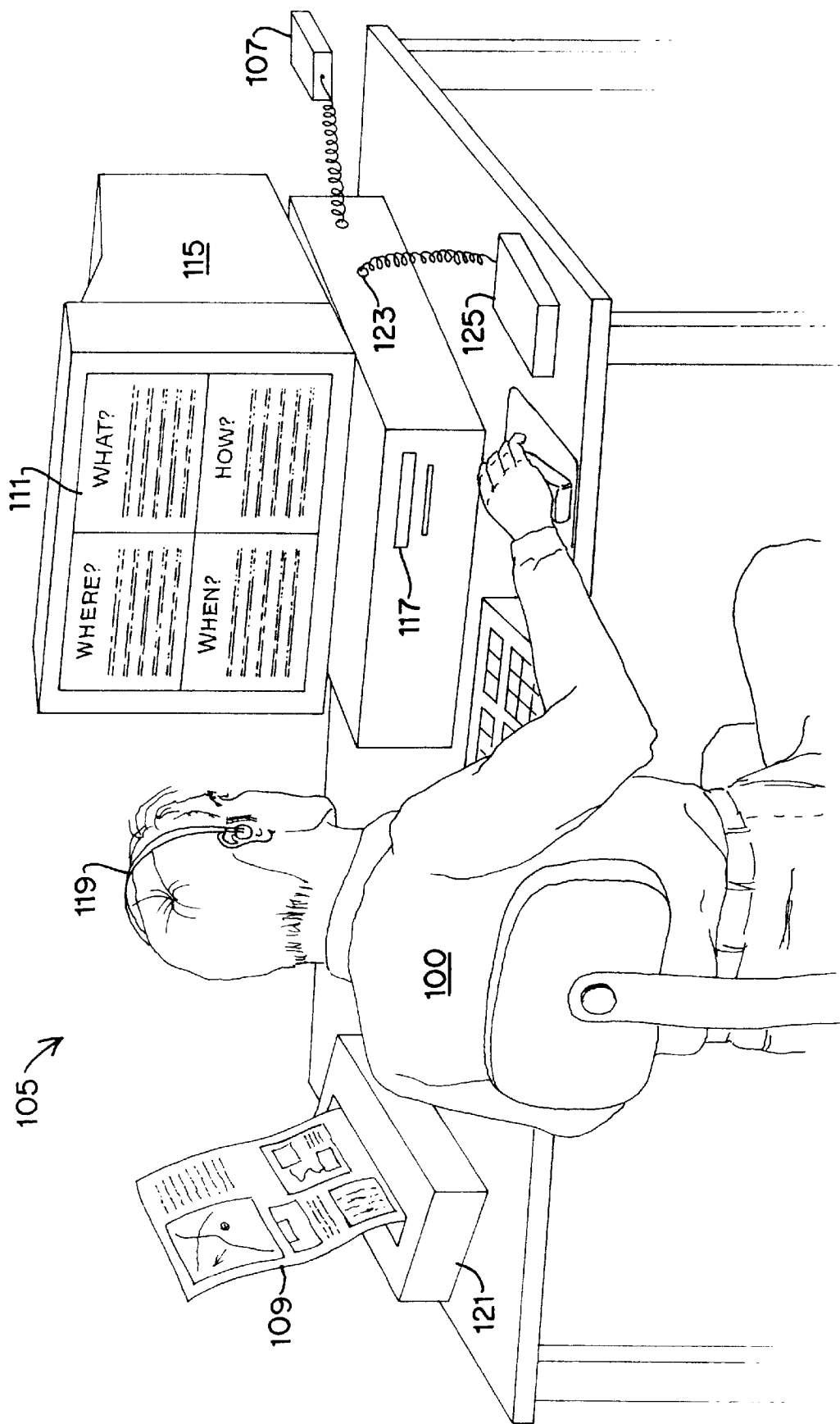
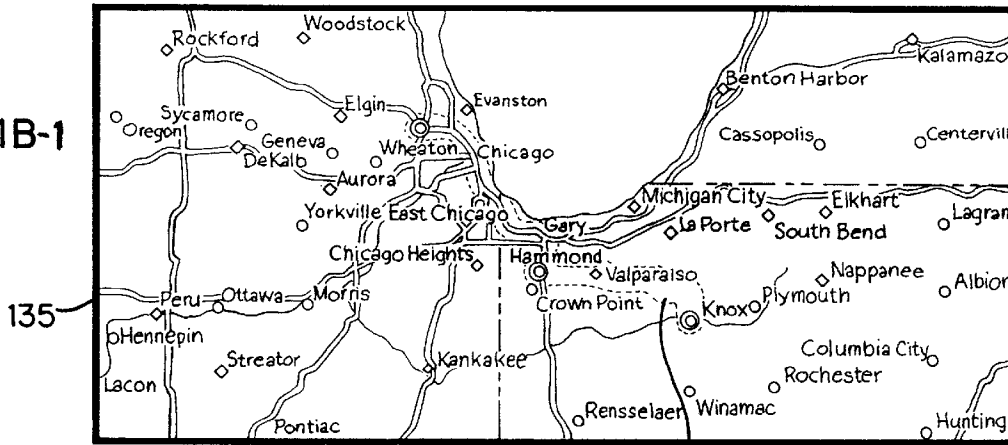


FIG 1A

FIG 1B-1



DIRECTIONS 137

FIG 1B-2

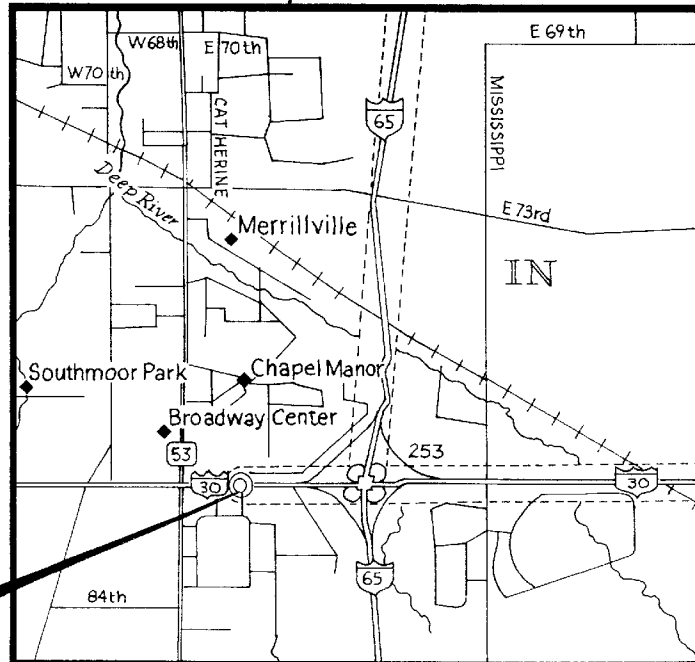
	Road	Dir	Near	Exit #	Time	Dist	Mi
1	START - Knox, IN						
2	US 35 (SR 8, CR 400 E, Heat	N	Knox, IN		0:00	0.0	0.2
3	US 35 (SR 8, CR 400 E)	N	Knox, IN		0:00	0.1	6
4	US 30	W			0:08	6.4	38
5	STOP - Jolly Ginger's, IN						
6	US 30 (Lincoln Hwy)	E	Merrillville, IN		0:59	44.5	0.4
7	I-65	N	Merrillville, IN	253	1:00	44.9	9
	I-90 (East-West Toll Rd)	NW		17 261	1:09	54.1	45
	I-190	W		78	2:00	99.6	3
	FINISH - Chicago O'Hare Intl (ORD), IL						

TOTAL DISTANCE: 103 MI, TOTAL TIME: 2:03

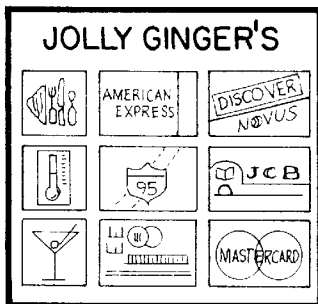
FIG 1B-3

145
Jolly Ginger's Merrillville, IN
 US Route 30 (Lincoln Highway)
 0.4 miles west of Route 65 on
 left - park rear or west side

147
TRIPS *@5-IN-b21Q-5/96*****
RESERVATION CONFIRMATION
 John Jones - party of 2
 5:15 PM 5/24/96
 nonsmoking



DETAIL MAP



149

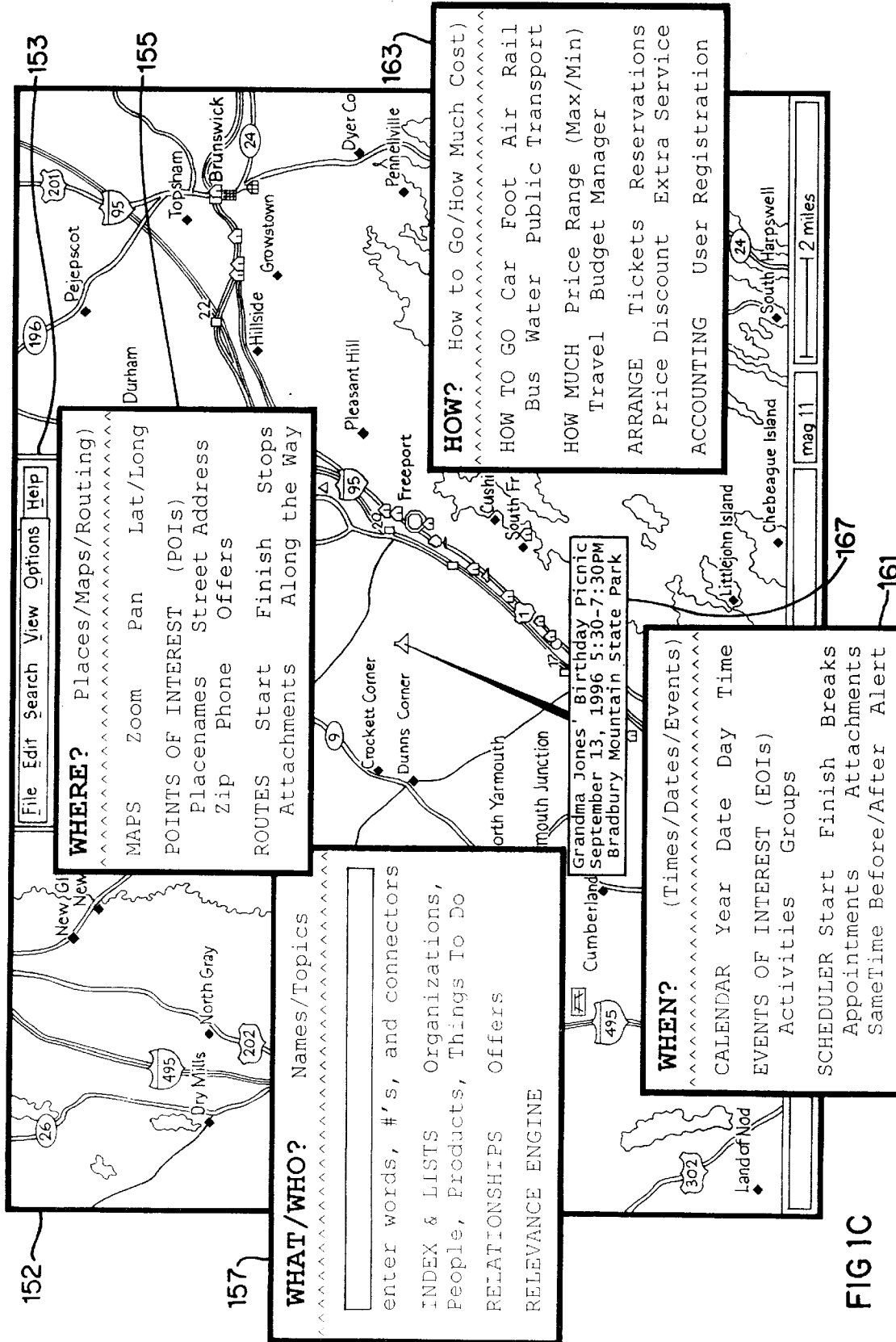


FIG 1C

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.