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McElroy et al.

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(54) **PLANNING AND SCHEDULING TOOL
ASSISTANT ASSURING HIGH UTILIZATION
OF RESOURCES**

(75) Inventors: **John W. McElroy**, Newtown Square, PA (US); **Sean P. McElroy**, Draper, UT (US); **Kirk Samsel**, Denver, CO (US)

(73) Assignee: **John W. McElroy**, Newtown Square, PA (US)

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Related U.S. Application Data

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(51) **Int. Cl.**
G06Q 10/00 (2006.01)
G06F 19/00 (2006.01)

(52) **U.S. Cl.** **705/7.12; 700/100**

(58) **Field of Classification Search** **705/7.12; 717/102; 700/100**

See application file for complete search history.

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Primary Examiner — Beth V Boswell

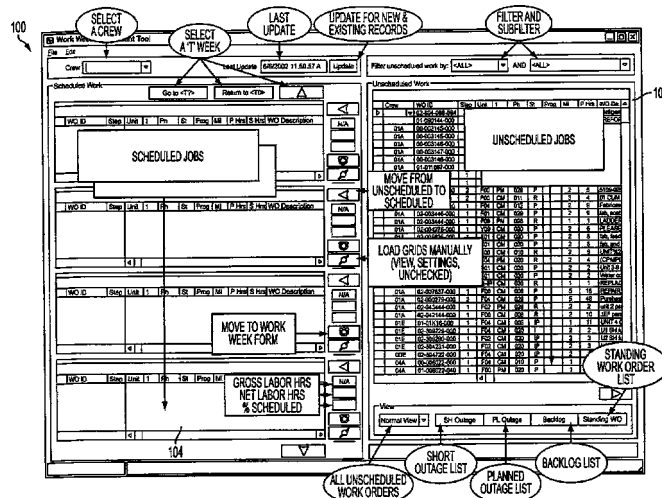
Assistant Examiner — Folashade Anderson

(74) *Attorney, Agent, or Firm* — Blank Rome LLP

(57) **ABSTRACT**

Schedulers, Planners, and Maintenance Supervisors in an Industrial facility can use the user interface of the present invention to extremely quickly move work order schedules, status planning, and manage resources. Additionally, key performance indicators or metrics on performance on how well the organization is doing is also cumbersome if not impossible in the current practice in these industrial organizations. The variables of this management include worker, crew, Work Order, Dates, Planning Status, planner, dates, etc. (see tech manual and summary sheets). The invention operates by interfacing with the Computerized Maintenance Management System (CMMS) database in a thoroughly interactive process. The local program constructs a parallel database and reads and feedbacks to the CMMS database frequently to stay current and accurate.

20 Claims, 4 Drawing Sheets



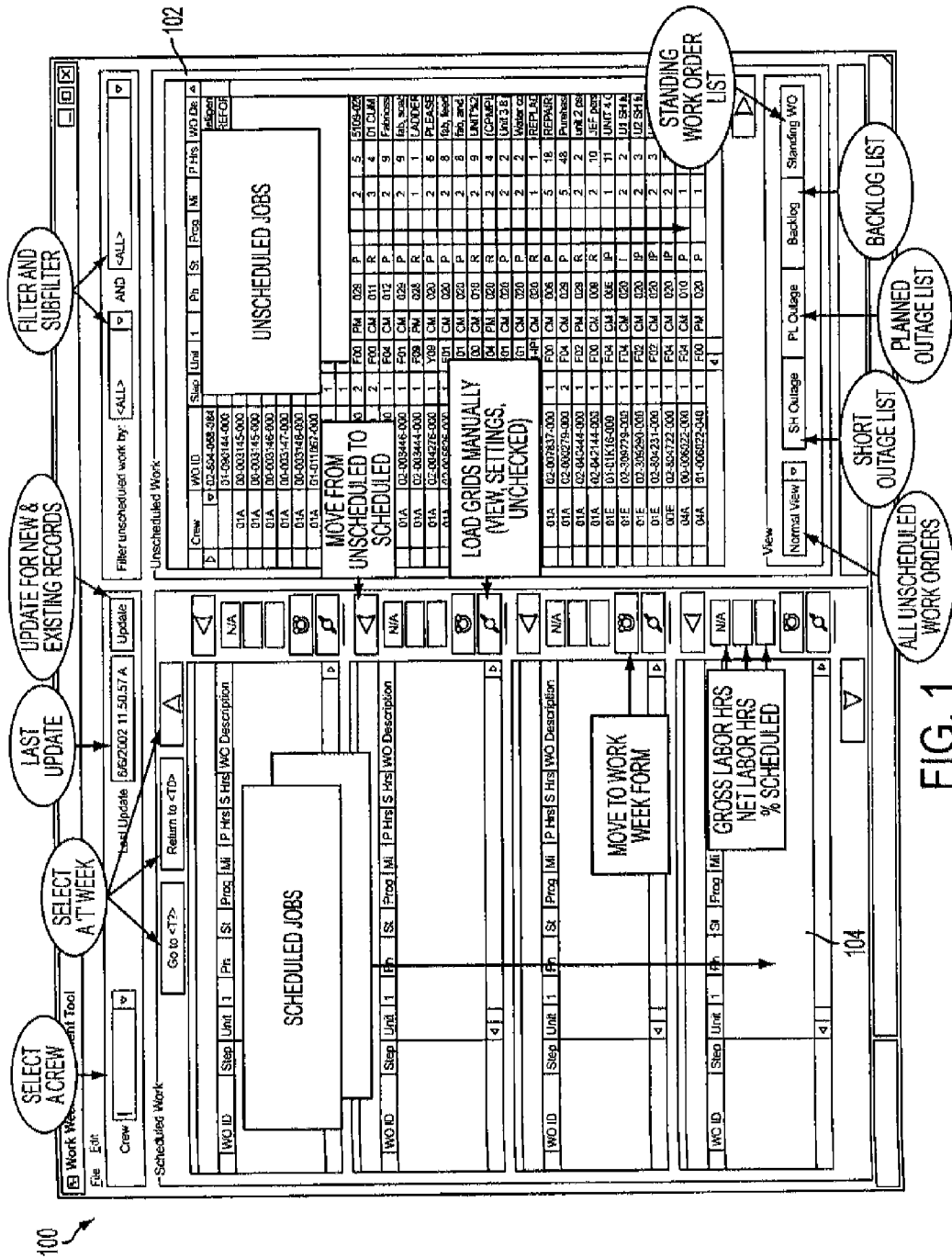


FIG. 1

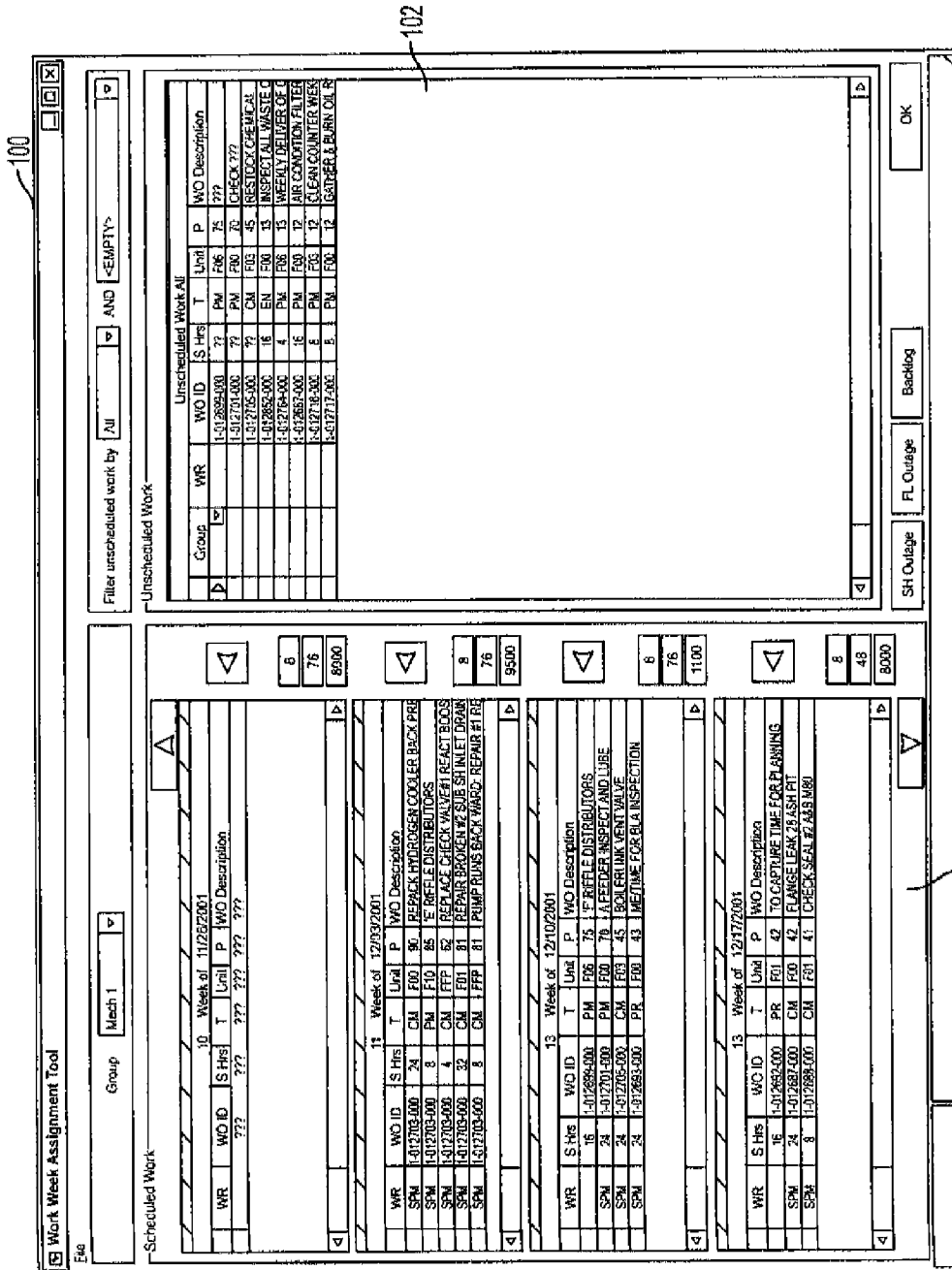


FIG. 2

300
308

Work Week Management Form

File: Crew: TM02 Week of: 2/11/02

Back Log Weeks: ???

Sponsored WO: ???

Emergency Hrs: ???

PM Compliance: ???

SA Compliance: N/A

EN Compliance: ???

Actual Hrs: ???

Actual Unscheduled Hrs: ???

Scheduled Work: ???

% Scheduled: ???

Net Hrs. Accumulated: ???

Indirect Work: ???

Sponsor Hrs: ???

Emergency Hrs: ???

Sch Compliance WO: ???

Sch Compliance Hrs: ???

Planning Effectiveness: ???

WO Completed w/o Hrs: ???

Planned Work

WO ID	Step	T	Unit	Pr	SA	Pro	M	P	Hrs	S	Hrs	A	Hrs	Description	#	M	#	T	#	W	#	TH	#	F	#	S	#	SU	#	ENSA	PLMR
02-00022-000	1	CM	F08	005	R	C	4	4	8	30	30	27	FLY ASH PUMP CHECK VALVE	4	30														014	EN	LWM
02-00048-000	1	CM	F00	013	R	C	2	4	16	8	8		REUP NEW OIL WAGON IN TOOL	1															003	EN	LWM
02-00068-000	1	CM	F00	012	R	F	1	3	3	3	3		RAW WATER STRAINERS, 3RD FC	2															003	EN	LWM
02-000615-000	1	CM	F00	011	R	F	2	1	2	2	2		HITTERS TO PIPE UP NEW HYDRON	2															301		LWM
02-000626-000	1	CM	F00	015	R	C	1	1	1	2	2		PEDESTAL GRINDER INSPECTION	1															301		LWM
02-001305-000	1	CO	F00	015	R	C	2	7.5	23	20	20		COMPRESSOR 1-2'S AFTER COOL	1															028		LWM
02-002577-000	1	PM	F01	012	R	C	2	6	16	16	16		UNIT 1-9 AND OLD SHIFT ENGS. OFF	2															003		LWM
02-401388-000	1	CM	F02	005	R	C	2	4	8	8	8		728FP-08 BELLY DRAIN GASMET	2															003		LWM
02-401120-000	1	CM	F04	010	R	C	2	6	16	16	16		???'# PPR #1 High Press #1 ????	2															003		LWM
02-00068-000	2	FL	S08	010	R	C	2	5	5	5	5		1100-FL-08-08-08-08-08-08-08	1															003		LWM

301
302

Other Unavailable Time

M	T	W	TH	F	S	SU
15	16	16	16	16	16	16

Vacation
Holiday
Other Leave
Sick
Off Days
Operations

304
304

Emergency Work

WO ID	Step	T	Unit	Pr	SA	Pro	M	P	Hrs	S	Hrs	A	Hrs	Description	#	M	#	T	#	W	#
02-00022-000	1	CM	F00	006	P	C	4	4	8	30	30	27	FLY ASH PUMP CHECK VALVE	4	30						
02-00048-000	1	CM	F00	013	R	C	2	4	16	8	8		REUP NEW OIL WAGON IN TOOL	1							
02-00068-000	1	CM	F00	012	R	F	1	3	3	3	3		RAW WATER STRAINERS, 3RD FC	2							
02-000615-000	1	CM	F00	011	R	F	2	1	2	2	2		HITTERS TO PIPE UP NEW HYDRON	2							
02-000626-000	1	PM	F00	015	R	C	1	1	1	2	2		PEDESTAL GRINDER INSPECTION	1							

Unavailable Time

M	T	W	TH	F	S	SU

Vacation
Holiday
Other Leave
Sick
Off Days
Operations

304
304

FIG. 3

300

Work Week Management Form

File View Crew: **TRM02** Week of: **3/18/02**

Gross Available Manpower Hrs: 4800	Back Log Weeks: ???	Actual Hrs: ???	Sponsor Hrs: ???
Total Available Manpower Hrs: ???	Sponsored WO: ???	Actual Unscheduled Hrs: ???	Emergency Hrs: ???
Net Available Manpower Hrs: ???	Emergency WO: ???	Scheduled Work: ???	Sch Compliance WO: ???
Back Log Man Hrs: 0	PM Compliance: ???	% Scheduled: ???	Sch Compliance Hrs: ???
# Of Back Log Work Orders: 0	SA Compliance: ???	Net Hrs Accounted: ???	Planning Effectiveness: ???
Resource Utilization: ???	EN Compliance: ???	Indirect Work: ???	WMO Completed wo Hours: ???

Planned Work

WO ID	Step	T	U	U	P	P	S	S	H	A	H	Description
02-000351-000	1	CM	F00	014	R							
02-001060-000	1	CM	F00	013	R							
02-001632-000	1	CM	F00	014	R							
02-001634-000	1	CM	F00	013	R							
02-001711-000	1	CM	F00	000	R							
02-001718-000	1	CM	F00	000	R							
02-001728-000	1	PM	F00	015	R							

Emergent Work

WO ID	Step	T	U	U	P	P	S	S	H	A	H	Description
01-012580-000	1	M	F00	014	R							
01-012755-000	1	M	F00	015	R							
01-012755-000	1	M	F00	016	R							
01-012800-000	3	M	F00	014	R							
01-012800-000	1	M	F00	014	R							

Planned Unavailable Time

Category	M	T	W	TH	F	S	SU
Utilization							
Holiday							
Other Leave							
Off Days							
Operations	37	2	3	4	5	6	7
Total	37	2	3	4	5	6	7

Unplanned Unavailable Time

Category	M	T	W	TH	F	S	SU
Utilization							
Holiday							
Other Leave							
Sick							
Training							
Meeting							
Community							
House Keeping							
Operations	13	10	5	4	3	2	1
Total	13	10	5	4	3	2	1
Overtime	3	8					

Graph 402

FIG. 4

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