

**Petroleum  
Equipment  
Patent  
Database  
Service**

**PEPData  
Instruction  
Manual**

**technology resources international, inc.**



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### **COMPUTER DATABASES**

Computer databases offer the following benefits:

- ↳ Easily enter error-free information.
- ↳ Easily add, change or delete data.
- ↳ Easily find records.
- ↳ Specify criteria for sorting records.
- ↳ Work with discrete groups of records.
- ↳ Perform calculations within the database program.
- ↳ Simultaneous access of the database through a network.
- ↳ Readily use information for multiple purposes.
- ↳ Create custom reports.
- ↳ Import/export data from one program to another.

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### **FILEMAKER PRO**

Even before sitting down to try out FileMaker Pro, it is important to understand a few key concepts and features. Although all database programs have much in common with each other, FileMaker Pro has distinct ways of doing things that clearly distinguish it from other programs. These differences explain – at least partially – why FileMaker Pro has long been the database program of choice for Macintosh users and is making great strides in the Windows world.

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## UNDERSTANDING LAYOUTS

Much of FileMaker Pro's power comes from a feature called layouts. A layout is an arrangement of a set of database fields for a particular file. Every layout is a view or window into the contents of a database, and different layouts present different views (frequently using different groups of fields). Individual layouts can be created for doing data entry or generating reports (on-screen or printed). Make as many layouts for each file as needed.

Database layout can be customized by doing any of the following:

- ↳ Changing the placement of the fields (to create a columnar report, for example).
- ↳ Eliminating fields from the layout that you do not want to display (while still being able to use them in other layouts where they *will* display).
- ↳ Removing some or all of the field labels to different positions (field labels are not attached to fields).
- ↳ Embellishing the layout by adding text and graphics and by modifying the font, style, color, pattern or border for fields.
- ↳ Eliminating layout parts that are not needed or adding parts that display summary statistics or present information that repeats on every page.

### **UNDERSTANDING MODES**

FileMaker Pro has four modes of operation: Browse, Layout, Find, and Preview. The mode that the user is in at any given moment governs the types of activities that can be performed:

- **Browse Mode:** Create and delete records, enter and edit data. (All data entry is performed in Browse Mode.)
- **Layout Mode:** Design, edit or delete database layouts.
- **Find Mode:** Search for or hide records, which meet the user's specified criteria.
- **Preview Mode:** Preview a report or layout on-screen (usually prior to printing).

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## GENERAL INFORMATION

PEPData is an organized collection of patents applicable to the petroleum equipment industry. It allows searching by a number of parameters and production of custom search reports. Should the user have additional patents, or want to organize the existing database differently, the data entry form simplifies adding patents, while editing provisions enable the addition or deletion of category subjects.

In its current form, the database includes US, European (EP) and World (WO) patents organized into 11 categories. It lists assignees, inventors, issue date, patent number, patent title and an abstract (when available).

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## SEARCHABLE FIELDS

All fields in a layout are searchable. However, it is not practical to search the Title and Abstract fields since an exact wording of the the first few words would be required. Fields which are easily searched separately, or in combination are:

- ↳ Category
  - ➔ Nozzles
  - ➔ Hoses, Break Aways, Fittings
  - ➔ Vapor Recovery
  - ➔ Dispensers
  - ➔ Point-of-Sale (POS)
  - ➔ Robotic Fueling
  - ➔ Robotic Miscellaneous
  - ➔ Instrumentation
  - ➔ Vehicle ORVR & Fillpipe
  - ➔ Underground Systems (UST)
  - ➔ Station Design
  - ➔ Customer Focus
  - ➔ Alternative Fuels (CNG, LNG)
  - ➔ Terminal Operations

## 8 PEPDATA OVERVIEW

- ↳ Patent Type
  - ➔ EP (European)
  - ➔ WO (World)
  - ➔ US
- ↳ Patent Number
- ↳ Issue Date
- ↳ Date Range
- ↳ Assignee
- ↳ Inventor

Information on how to search these fields is provided in the section “Searching the Database” on page 10.

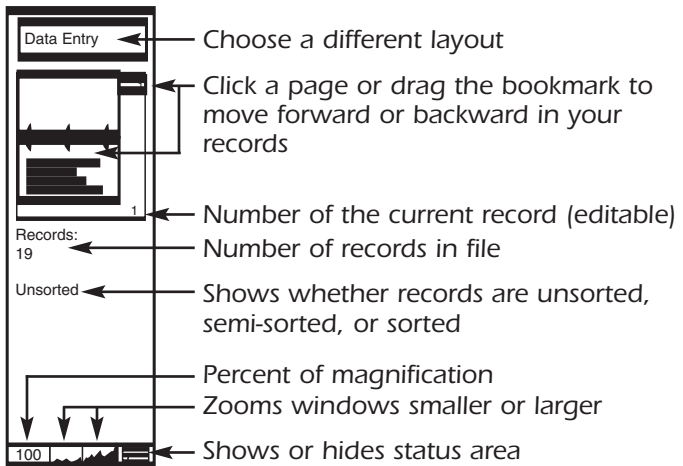
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### DATA LAYOUTS

The database provides several options for viewing data on the screen and for printing special reports.

After opening database file in Browse Mode, the status area will appear on the right side with a layout button at the top. **Browse Mode**

Clicking on the layout button will open the various choices.





## Data Entry

Layout contains all information available in the record. Several data blocks already contain preassigned information which can be selected with the mouse: Category, Type and some Assignees.

## By Company

Contains Patent Assignee in the first field and also includes Issue Date, Type, Patent Number, Inventor and Patent Title.

## By Patent No.

Contains Patent Type and Number in the first two fields and includes Issue Date, Inventor and Patent Title.

## By Category

Contains Patent Category in the first field and includes Assignee, Type, Patent Number, Issue Date and Inventor.

## By Company (Patent) with Category

These two layouts are identical to the By Company and By Patent categories except that the search category will print on the page header. The layouts are useful for producing reports of patent lists sorted by category. For example: after finding all nozzle patents, the resulting list can be printed in either of these layouts, i.e., sorted by patent number or assignee with the title "Nozzles" appearing on each printed page. For unsorted entries, using these layouts will result in the category of the first record appearing on the page to be printed in the header for the page.

## By Type and Patent No.

Will only show Patent Type and Number, and will print a multi-column page. This layout is included to provide a quick overview of patents within categories.

### SEARCHING THE DATABASE

As indicated in the previous section, all data fields are searchable, although Categories, Patent Numbers, Assignees and Inventors, alone or in combination, will produce better results. Most data fields except for the Patent Category, can be searched from all but one layout. Obviously the Type and Patent Number layout allows searching only by Patent Type and Patent Number. The Patent Category is present in the Data Entry and By Category layouts and may be searched in either layout.

In the following instructions, the Macintosh keyboard equivalent will be shown first and the Windows keyboard command second.

1. To search the database, use the appropriate layout and go to FIND in the Mode menu, or use **⌘F** (Mac) or **CONTROL F** (Windows) from the keyboard.
2. With the mouse, click on the appropriate box (or Tab to it) and enter the value(s) for the search.
3. Data Ranges may be searched by entering the start date and end date, separated by three (3) periods, i.e., 1/1/95...12/31/95 will produce a list of all 1995 patents.

#### Example:

Find all nozzle patents issued to OPW in 1996:

Using the By Category layout,

1. Type `nozzle` in the Category box.
2. Type `Dover` in the Assignee box.
3. Type `1/1/96...12/31/96` in the Issue Date box.
4. Click the FIND button in the Status Bar or press **ENTER** on the keyboard.

#### Result:

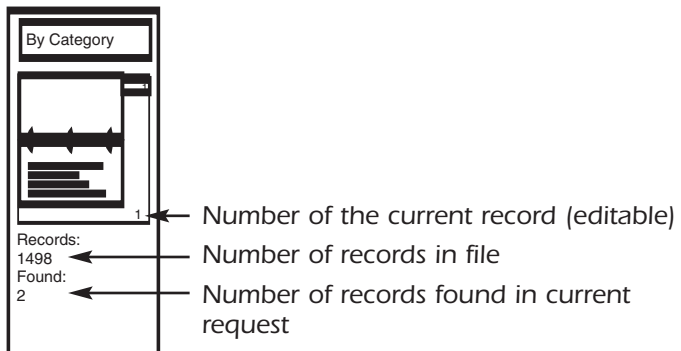
One each EP and US patents covering nozzles.

**Hint:**

When searching for Assignees, make sure to use the corporation name rather than the subsidiaries.

**Note:**

1. For Dover Corporation, we have found patent assignments to Dover Corp., Delaware Capital Formation Corp. and OPW Fueling Components Europe. We have tried to make all entries consistent under the corporate name.
2. After finding the 2 OPW patents, the Status Bar will now display the total number of records and the number of patents found.

**Find Mode**

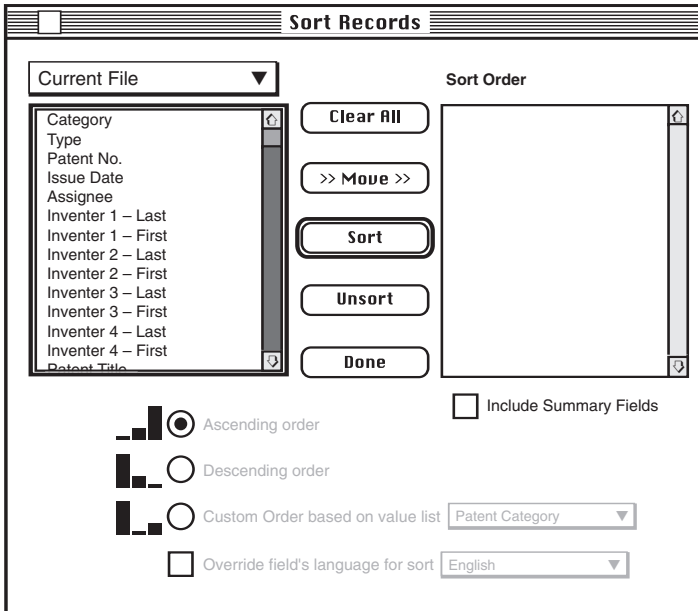
To return to the entire data set, press **⌘J** or **CONTROL J**.

**SORTING THE DATA**

Unsorted, the data will appear in the order it was entered. In order to derive the most benefit from the data, it needs to be sorted by Issue Date, Type and Patent Number, Inventor or Assignee. For sorts by Inventor or Assignee, the data will be presented alphabetically. Whenever a patent was not assigned to a company, we have listed the Assignee as Unassigned.

## 12 PEPDATA SEARCHING

1. From the MODE menu, select SORT (**⌘S** or **CONTROL S**). A SORT RECORDS window appears showing all database entries on the left side.



2. With the mouse, select any entry and press the MOVE button; the entry will also appear on the right side. Repeat for any other values.
3. Click the SORT button. The window disappears and your sorted patents will appear in the layout you chose. You may select other layouts for this sort.

### Example:

Sort all patents by Category, Type and Issue Date.

1. In the MODE menu, select SORT (**⌘S** or **CONTROL S**).
2. In the SORT RECORDS window,
  - select CATEGORY and MOVE
  - select PATENT TYPE and MOVE
  - select PATENT NUMBER and MOVE
  - click the SORT button

3. The resulting layout will be sorted alphabetically by Category and within each category by type (EP, US, WO) and in numerical order by patent for each type.

**Note:**

A separate sort by date was not necessary since the patents will automatically be placed in numerical order. For US patents, a date rather than the type of patent may be appropriate since Design patents, Reissued patents and H-patents will otherwise be sorted together rather than by date as part of the entire sample.

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**PRINTING THE DATA**

Any search report may be printed. Using our layouts, about 12 patents per page will print, resulting in about 140 pages for the entire database.

The Type & No. layout will produce three single spaced columns and provides for about 100 entries per page.



Special Reports may be printed using the By Patent or By Company w/Category layouts. A search of nozzle patents issued in 1990, sorted by Assignee and by Patent Number, will produce two (2) reports titled "NOZZLES", one numerical by patent, the other alphabetically by assignee.

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**ADDITIONAL EXAMPLE**

Produce a report of Robotic Fueling patents issued since 1990:

**Report by Assignee**

In the By Category layout

1. From the MODE menu, select Find ( F) or  F).

2. Type robotic fueling in the Category box.
3. Type 1/1/90...8/26/98 in the Issue Date box.
4. Click the FIND button in the STATUS BAR or press **ENTER** on the keyboard.
5. From the MODE menu, select Sort (**⌘S** or **CONTROL S**).
6. In the SORT RECORDS window,
  - select Clear All
  - select Assignee and MOVE
  - select Patent Type and MOVE
  - select Patent Number and MOVE
  - click the SORT button
7. In the STATUS BAR select By Company w/Category layout.
8. From the FILE menu, select Print (**⌘P** or **CONTROL P**).
9. A report sorted by Assignee, Patent Type and Patent Number will be printed with the title "ROBOTIC FUELING".

### Report by Patent

1. – 5. Follow Report by Assignee.
6. In the SORT RECORDS window,
  - select CLEAR ALL
  - select PATENT TYPE and MOVE
  - select PATENT NUMBER and MOVE
  - click the SORT button
7. In the STATUS BAR select By Patent w/Category layout.
8. From the FILE menu, select PRINT (**⌘P** or **CONTROL P**).
9. A report sorted by Patent Type and Patent Number will be printed with the title "ROBOTIC FUELING".

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### SEARCHING BY INVENTOR

A future update will facilitate searching by inventor. The data entry form lists up to four inventor first and last names. At this point, searching by inventor in the various

layouts will only produce results for the first (primary) inventor. If a patent fails to appear, try using the Data Entry layout for the search and entering the inventor's name in the blocks for the second third or fourth inventor. In the future, all name records will be linked to be searchable as inventor, regardless of their order on a list of multiple inventors.

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