GUJARAT TECHNOLOGICAL UNIVERSITY

(GTU)

INNOVATION COUNCIL (GIC)

Patent Search & Analysis Report (PSAR)

Date of Submission : 24/09/2016

Dear **Patel Miloni,**

Studied Patent Number for generation of PSAR	:	**16BE7_130020107065_2**

PART 1: PATENT SEARCH DATABASE USED

1. Patent Search Database used	:	Google Patents
Web link of database	:	https://patents.google.com/
2. Keywords Used for Search	:	DATABASE,ERP,FRONTEND
3. Search String Used	:	ERP as database and frontend
4. Number of Results/Hits getting	:	1927

PART 2: BASIC DATA OF PATENTED INVENTION /BIBLIOGRAPHIC DATA

5. Category/ Field of Invention	:	Computer/IT Engineering
6. Invention is Related to/Class of Invention	:	Architecture and techniques for providing product configurations to an enterprise resource planner
6 (a) : IPC class of the studied patent	:	G06Q10/06,G06Q10/06315
7. Title of Invention	:	Architecture and techniques for providing product configurations to an enterprise resource planner
8. Patent No.	:	US20020099583A1
9. Application Number	:	US09768218
9 (a) : Web link of the studied patent	:	https://patents.google.com/patent/US20020099583A1/en?q=erp&q=database&q=frontend
10. Date of Filing/Application (DD/MM/YYYY)	:	24/01/2001
11. Priority Date (DD/MM/YYYY)	:	24/01/2001
12. Publication/Journal Number	:	10/06 20130101,10/06315 20130101
13. Publication Date (DD/MM/YYYY)	:	25/07/2002
14. First Filled Country : Albania	:	Albania

15. Also Published as

Sr.No	Country Where Filled	Application No./Patent No.
1	Albania	09/768218

16. Inventor/s Details.

Sr.No	Name of Inventor	Address/City/Country of Inventor
1	Matusek Lawrence W	Gurnee, IL
2	Peterson Craig A	Hawthorn Woods, IL
3	Cochran Michael W	Decatur, AL

17. Applicant/Assignee Details.

Sr.No	Name of Applicant/Assignee	Address/City/Country of Applicant
1	Moore North America Inc	1100 North Glebe Road Arlington VA 22201 US

18. Applicant for Patent is : College

PART 3: TECHNICAL PART OF PATENTED INVENTION

19. Limitation of Prior Technology / Art

A custom front-end for order entry and pricing with straight-forward integration to a conventional enterprise resource planning (ERP) system allows integration between the custom front-end and the existing ERP system in a straightforward manner without the need to modify the ERP system source code or other functionality. Order-specific data is stored in custom tables created under the ERP database while using standard ERP application classification for maintaining the link to the ERP object and the custom configuration. Custom function modules enable the dynamic transfer of data between the order specific data and the native ERP variant configuration module. The tables provide a middle ground between the ERP application and any number of custom front end interfaces such as web-based applications accessible via intranets and/or the Internet.

20. Specific Problem Solved / Objective of Invention

The present invention relates to product configurator/resource planning systems, and more particularly, to techniques for connecting Internet-based and other applications to product variant configurator components. More particularly, the invention relates to an external application that can be used to replace the product variant configurator of an enterprise resource planning (ERP) application so as to allow users to create product configurations outside of the normal variant configuration transactions in the ERP system while continuing to take advantage of other ERP application functionality. In still more detail, the present invention provides a system architecture for configuring and selling products in external applications and reading the sales and configuration data in a ERP system to trigger transactions and explode configurable bills of materials and task lists.

21. Brief about Invention

These and other features and advantages provided by the invention will be better and more completely understood by referring to the following detailed description of presently preferred embodiments in conjunction with the drawings, of which:
[0050]
[0050]FIG. 1 shows an example prior art ERP system interfacing to an external application;
[0051]
[0051]FIG. 2 shows a presently preferred example embodiment of an ERP system including customized configuration and control tables providing a shared middle ground between the ERP system and external applications such as network-based front-end products;
[0052]
[0052]FIG. 2A is a flowchart of an example variant function technique; and
[0053]
FIGS. 3-10 show example customized tables for a particular business form product configuration application.

22. Key learning Points

In the example shown, the ERP system 50 includes, in addition to the variant configurator 52 function, several other functions including for

example:
[0056]
routing function 54,
[0057]
bill of materials (BOM) explosion function 56,
[0058]
costing function 66,
[0059]
material master function 62, and
[0060]
sales order function 68.
[0061]
In the example embodiment, the routing function 54 provides routing information; the BOM explosion function 56 allows the ERP system 50 to explode a bill of materials; the costing function 66 provides component and combination cost breakdowns; the material master function 62 provides a master material list; and the sales order function 68 generates and processes an order based on the variant configurator functionality. The variant configurator 52 may interact with routing information provided by a routing information function 54; bill of materials (BOM) information from a BOM function 56; and configuration data from certain native tables 58, 60 within the ERP system database. Tables 58, 60 may, for example, store available product options for a range of possible product configurations.

23. Summary of Invention

Before the industrial age, most products were made to order by individual craftsmen and craftswomen based on customer specifications. For example, the village blacksmith would make his customers precisely the type of tools they wanted, the weaver would weave a blanket in the colors and materials the customer asked for, and the silversmith would make the precise jewelry or tea set in a design that struck the customer's fancy. While custom made-to-order goods had the advantage of giving customers exactly what they wanted, manufacturers eventually found that tremendous cost savings could be achieved through mass production. Factory mass-production of high quality products transformed the world's economy and made goods available to those who previously might not have been able to afford them.
[0003]
While most of the goods bought today are mass produced, there are still certain goods that can or should be custom ordered. For example, if you have ever bought a new car, you know that there are a variety of different options you can request. For example, you may be able to choose:
[0004]
different exterior paint colors, styles and options (e.g. pin striping);
[0005]
interior colors;
[0006]
upholstery and style of the seats (e.g., leather or cloth, bench or bucket);
[0007]
engine size;
[0008]
different sound systems; and
[0009]
other options and variations.
[0010]
This form of custom manufacturing makes available a number of customer-selectable product variations. The customer can configure the product by, for example, selecting from a menu of options. The product can still be mass produced on a factory floor from standard components, but the manufacturer can build each individual product to order based on the customer's selection. Such techniques can be applied to a variety of products in addition, to automobiles including, for example:
[0011]
houses
[0012]
kitchens
[0013]
bathrooms
[0014]
business forms
[0015]
personalized stationary
[0016]
personal computing equipment
[0017]
factory equipment
[0018]
testing equipment
[0019]
pipes and conduits
[0020]

clothing
[0021]
home furnishings
[0022]
other products.

24. Number of Claims : 9

25. Patent Status : Published Application

26. How much this invention is related with your IDP/UDP?

< 70 %

27. Do you have any idea to do anything around the said invention to improve it? (Give short note in not more than 500 words)

A User can also add deadlines to the followups. Alert Generation can also be made automatic so each time user has not to worry about generating alerts. and also the principles and features of this invention may be employed in various and numerous embodiments.