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Decizie de indexare a faptei de plagiat la poziţia 00419 / 06.02.2018 şi pentru admitere la publicare în volum tipărit

care se bazează pe:

A. Nota de constatare şi confirmare a indiciilor de plagiat prin fişa suspiciunii inclusă în decizie.

Fişa suspiciunii de plagiat / Sheet of plagiarism's suspicion		
Opera suspicionată (OS)		**Opera autentică (OA)**
Suspicious work		**Authentic work**
OS	TURCU Cristina, CERLINCA Marius, PRODAN Remus, CERLINCA Tudor, TURCU Cornel, GÎZA Felicia and POPA Valentin. Enhancing enterprise performance with RFID technology. *Proceedings of the 12th WSEAS international conference on Computers.* 2008 Jul 23. pp. 23-25.	
OA	TURCU Cristina, CERLINCA Marius, CERLINCA Tudor, PRODAN Remus, TURCU Cornel, GÎZA Felicia and POPA Valentin. An Integrated RFID-Based B2B System for Supply Chain Logistics and Warehousing. *International Journal of Computers and Communications*. 2007. **1**(3). pp.90-98.	
Incidenţa minimă a suspiciunii / Minimum incidence of suspicion		
P01:	p.724:Abstract	p.90:Abstract
P02:	p.724:08d – p.725:05s	p.90:19d – p.90:42d
P03:	p.726:09 – p.726:39d	p.91:28s – p.92:11d
P04:	p.727:Fig.1	p.94:Fig.2
P05:	p.729:23s – p.729:41s	p.97:11d – p.98:02s
Fişa întocmită pentru includerea suspiciunii în Indexul Operelor Plagiate în România de la Sheet drawn up for including the suspicion in the Index of Plagiarized Works in Romania at www.plagiate.ro		

Notă: Prin „p.72:00" se înţelege paragraful care se termină la finele pag.72. Notaţia „p.00:00" semnifică până la ultima pagină a capitolului curent, în întregime de la punctul iniţial al preluării.

Note: By „p.72:00" one understands the text ending with the end of the page 72. By „p.00:00" one understands the taking over from the initial point till the last page of the current chapter, entirely.

B. Fişa de argumentare a calificării de plagiat alăturată, fişă care la rândul său este parte a deciziei.

Echipa Indexului Operelor Plagiate în România

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Fişa de argumentare a calificării

Nr. crt.	Descrierea situaţiei care este încadrată drept plagiat	Se confirmă
1.	Preluarea identică a unor pasaje (piese de creaţie de tip text) dintr-o operă autentică publicată, fără precizarea întinderii şi menţionarea provenienţei şi însuşirea acestora într-o lucrare ulterioară celei autentice.	✓
2.	Preluarea a unor pasaje (piese de creaţie de tip text) dintr-o operă autentică publicată, care sunt rezumate ale unor opere anterioare operei autentice, fără precizarea întinderii şi menţionarea provenienţei şi însuşirea acestora într-o lucrare ulterioară celei autentice.	
3.	Preluarea identică a unor figuri (piese de creaţie de tip grafic) dintr-o operă autentică publicată, fără menţionarea provenienţei şi însuşirea acestora într-o lucrare ulterioară celei autentice.	✓
4.	Preluarea identică a unor tabele (piese de creaţie de tip structură de informaţie) dintr-o operă autentică publicată, fără menţionarea provenienţei şi însuşirea acestora într-o lucrare ulterioară celei autentice.	
5.	Republicarea unei opere anterioare publicate, prin includerea unui nou autor sau de noi autori fără contribuţie explicită în lista de autori	
6.	Republicarea unei opere anterioare publicate, prin excluderea unui autor sau a unor autori din lista iniţială de autori.	
7.	Preluarea identică de pasaje (piese de creaţie) dintr-o operă autentică publicată, fără precizarea întinderii şi menţionarea provenienţei, fără nici o intervenţie personală care să justifice exemplificarea sau critica prin aportul creator al autorului care preia şi însuşirea acestora într-o lucrare ulterioară celei autentice.	✓
8.	Preluarea identică de figuri sau reprezentări grafice (piese de creaţie de tip grafic) dintr-o operă autentică publicată, fără menţionarea provenienţei, fără nici o intervenţie care să justifice exemplificarea sau critica prin aportul creator al autorului care preia şi însuşirea acestora într-o lucrare ulterioară celei autentice.	✓
9.	Preluarea identică de tabele (piese de creaţie de tip structură de informaţie) dintr-o operă autentică publicată, fără menţionarea provenienţei, fără nici o intervenţie care să justifice exemplificarea sau critica prin aportul creator al autorului care preia şi însuşirea acestora într-o lucrare ulterioară celei autentice.	
10.	Preluarea identică a unor fragmente de demonstraţie sau de deducere a unor relaţii matematice care nu se justifică în regăsirea unei relaţii matematice finale necesare aplicării efective dintr-o operă autentică publicată, fără menţionarea provenienţei, fără nici o intervenţie care să justifice exemplificarea sau critica prin aportul creator al autorului care preia şi însuşirea acestora într-o lucrare ulterioară celei autentice.	
11.	Preluarea identică a textului (piese de creaţie de tip text) unei lucrări publicate anterior sau simultan, cu acelaşi titlu sau cu titlu similar, de un acelaşi autor / un acelaşi grup de autori în publicaţii sau edituri diferite.	
12.	Preluarea identică de pasaje (piese de creaţie de tip text) ale unui cuvânt înainte sau ale unei prefeţe care se referă la două opere, diferite, publicate în două momente diferite de timp.	

Notă:

a) Prin „provenienţă" se înţelege informaţia din care se pot identifica cel puţin numele autorului / autorilor, titlul operei, anul apariţiei.

b) Plagiatul este definit prin textul legii[1].

> *„ …plagiatul – expunerea într-o operă scrisă sau o comunicare orală, inclusiv în format electronic, a unor texte, idei, demonstraţii, date, ipoteze, teorii, rezultate ori metode ştiinţifice extrase din opere scrise, inclusiv în format electronic, ale altor autori, fără a menţiona acest lucru şi fără a face trimitere la operele originale…".*

Tehnic, plagiatul are la bază conceptul de **piesă de creaţie** care[2]:

> *„…este un element de comunicare prezentat în formă scrisă, ca text, imagine sau combinat, care posedă un subiect, o organizare sau o construcţie logică şi de argumentare care presupune nişte premise, un raţionament şi o concluzie. Piesa de creaţie presupune în mod necesar o formă de exprimare specifică unei persoane. Piesa de creaţie se poate asocia cu întreaga operă autentică sau cu o parte a acesteia…"*

cu care se poate face identificarea operei plagiate sau suspicionate de plagiat[3]:

> *„…O operă de creaţie se găseşte în poziţia de operă plagiată sau operă suspicionată de plagiat în raport cu o altă operă considerată autentică dacă:*
> *i) Cele două opere tratează acelaşi subiect sau subiecte înrudite.*
> *ii) Opera autentică a fost făcută publică anterior operei suspicionate.*
> *iii) Cele două opere conţin piese de creaţie identificabile comune care posedă, fiecare în parte, un subiect şi o formă de prezentare bine definită.*
> *iv) Pentru piesele de creaţie comune, adică prezente în opera autentică şi în opera suspicionată, nu există o menţionare explicită a provenienţei. Menţionarea provenienţei se face printr-o citare care permite identificarea piesei de creaţie preluate din opera autentică.*
> *v) Simpla menţionare a titlului unei opere autentice într-un capitol de bibliografie sau similar acestuia fără delimitarea întinderii preluării nu este de natură să evite punerea în discuţie a suspiciunii de plagiat.*
> *vi) Piesele de creaţie preluate din opera autentică se utilizează la construcţii realizate prin juxtapunere fără ca acestea să fie tratate de autorul operei suspicionate prin poziţia sa explicită.*
> *vii) In opera suspicionată se identifică un fir sau mai multe fire logice de argumentare şi tratare care leagă aceleaşi premise cu aceleaşi concluzii ca în opera autentică…"*

[1] Legea nr. 206/2004 privind buna conduită în cercetarea ştiinţifică, dezvoltarea tehnologică şi inovare, publicată în Monitorul Oficial al României, Partea I, nr. 505 din 4 iunie 2004
[2] ISOC, D. *Ghid de acţiune împotriva plagiatului: bună-conduită, prevenire, combatere*. Cluj-Napoca: Ecou Transilvan, 2012.
[3] ISOC, D. *Prevenitor de plagiat*. Cluj-Napoca: Ecou Transilvan, 2014.

Enhancing Enterprise Performance with RFID Technology

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P01 *Abstract:* - The need to track and trace objects in real time has determined numerous companies to adopt one of today's greatest contributory technologies, namely Radio-Frequency Identification (RFID). The paper examines the impact and the potential benefits generated by the integration of this technology in business-to-business (B2B) applications through a proposed RFID_B2B system. This system offers multiple performance levels for varying system and application needs, and can be readily personalized to meet current and future user demands. A proof of concept has been introduced to demonstrate the feasibility of an RFID_B2B application in a specific supply chain. A realistic business scenario has been taken into consideration to illustrate that RFID technology may enhance the operational efficiency in enterprise systems and even help numerous companies comply with the ever-growing demands of business customers. Furthermore, the authors maintain that RFID enables more integrated and collaborative B2B e-commerce solutions. The paper aims to increase awareness about the tremendous potential of integrating RFID technologies in B2B applications.

Key-Words: - RFID, B2B, tag, PDA, supply chain, enterprise, business

1 Introduction

RFID (Radio Frequency IDentification) technology is classified as a wireless Automatic Identification and Data Capture (AIDC) technology. RFID allows the identification, location, tracking and monitoring of various objects such as individual products or palleted goods; real-time information about these objects can be easily obtained from the factory, through shipping and warehousing, to the retail location [1, 2]. Incorrect or outdated information used in invoices, bills of lading or purchase orders can result in product delivery errors and lost sales estimated at more than $50 billion annually [3]. But RFID technology can prevent these costly data inaccuracies.

Business-to-Business (B2B) is the exchange of products, services, or information between businesses rather than between businesses and consumers [4, 5].

For many companies, providing real-time product availability to customers at minimal operation costs is an important factor that determines the success of their businesses. As one IBM study reveals, 70% of a typical distribution center's cost is represented by labor [6]. Tagging inventory upstream with RFID tags and automating this process via an integrated RFID_B2B solution achieve high levels of accuracy with better labor efficiencies and better velocity.

Following a short investigation of a business-to-business process, we maintain that RFID technology opens new opportunities for enterprise systems to operate efficiently and better comply with the demands of business customers. Furthermore, we also argue that RFID enables more integrated and more collaborative B2B e-commerce solutions [6]-[8].

2 System architecture

P02 Our research team has developed an RFID_B2B integrated system which combines the advantages of B2B with those of RFID technology and which presents itself as a viable solution for the problems raised by globalization. The software system deals with business relations between corporations, big companies and groups of companies, in order to optimize the flow of materials among them and the supply chain management inside every company. But the system architecture is flexible and easily extensible.

To identify both parts and finite products, our system uses passive 13.56 MHz tags. Unique IDs are used to control and trace every part of a finite product. If this system is embraced by the entire supply chain management, final consumers will be able to follow the entire production chain of a finite product. And this is possible if the traceability information is memorized on each tag attached to some part of the final product.

- a network comprising several gate devices; each gate has attached an RFID reader and processes the local data;
- PDA devices with attached RFID readers;
- an IBM-PC compatible computer which runs the local B2B server [9];
- an IBM-PC compatible computer which runs the central B2B server [9].

P03 In this case study, we will consider four different complexity gates (LCCG, MCCG, HCCG) for each storehouse; the gates are connected to a RS485 network that will end on a PC with an RS485-RS232 connector [10]-[12]. In case the system uses an Ethernet connection, the MODBUS TCP/IP communication protocol is selected. The system is highly configurable and can be adapted to any demand.

Every storehouse has an Internet-connected PC running the OPC data server (OPC DAServer) [13]. The OPC client application may be installed on any computer connected to the company network and may be used to watch data flow and even to modify the information from RFID tags and so on. At this level (company level), the application will be installed on a central system performing several operations such as the collection of storehouse data, the storage of the data in a database and the computation of reports about inputs and outputs or the stock level.

The basic information submitted by the control gates (read from the RFID tags) are imported by the OPC Data Server and saved into the central company database server using the Internet connection available. The software system we have devised enables the use of PDAs to read/write RFID tags associated to different products/parts.

Another feature of our software system is that a WEB server may be easily installed in any company in order for the general public (future partners) or associated companies to gain access to certain information.

Let us consider the following example. Company PROD receives from a partner company named DISTRIB an order to deliver a Desktop PC with the following configuration: All-In-One Asus K8U-X mainboard, Socket 754, AMD Athlon 64 3200+ processor, HDD Western Digital Caviar SE 200GB. Every PC component comes with an RFID tag that enables the unique identification of each product and contains specific product data. The components are registered when they leave the initial warehouse and then read when they enter the destination warehouse. The whole information is used to create the stock database; the same information may be employed for subsequent analyses or queries such as identifying transport times. Any system user may determine when and where an RFID tag was written/read and can trace all significant aspects related to a specific product. Stock related information is then sent to the main server of company PROD. Depending on the system configuration, the partner companies registered into the system can access this information.

Our system provides a high degree of generality and enables its users to define their own templates, which describe the data format to be memorized on tags [15]. Script-enabled templates defined by the user [16] are used to trigger some local processing at the level of gates when a tag is read.

4 System Functionality

RFID tags are attached to every component, spare part or final product manufactured by company PROD. Each tag will pass through the RFID writing/reading area of at least three RFID readers functioning at the following levels:

1. First, there is the PC reader where the tag for the final product is initialized. After reading the information from each component tag, the reader writes the significant information on the main tag.
2. Second, there is the gate level where the main tag is read; the script is executed and, if necessary, the content of the tag is updated.
3. Third, there is the PDA level where the component data or final product data is verified. In other words, the data is processed in order to read/write component tags or final product tags.

In accordance with this organizing principle, templates have been devised for each component and final product at the PC level. Similarly, scripts may be created to be compiled to byte-code and written to tags; each script is executed when a tag is read at any level (PC/PDA/gate) (Fig. 2). For instance, a script for final product tags may be defined to be executed at the level of the distribution company. If the product happens to be rejected (PROD_ACCEPTED = 0), then it should never be intercepted at any gates except for the entry/exit ones. The considered script (Fig. 2) will generate a “forbidden gate” event when that product is detected anywhere inside the company (gates, PDA, etc.).

When a template is created, the establishment of visual groups is advisable for a better organization of all fields considered; in this way, the visualization of PDA data is correct and logical. The creation of a new template requires the activation of the pre-visualization field and the implementation of the correct and desired configuration. The data to be displayed at the PDA level is easy to visualize (Fig. 3).

Through the use of user-defined templates and scripts, the presented system can be easily adapted to meet future needs of the user just as well as it meets today’s needs. The created templates are used in order to write some product tags with specific information. This information is recorded both on database and tags (Fig.

4). Product information is constantly updated in the stock database and the web-server database. Users can create a succession of personalized reports using the report editor embedded in our system; in fact, specific SQL statements are generated and saved into text files for further usage. The data requested for display may be easily exported in Excel files.

All created templates and tags can be exported from the database into an XML file or imported from an XML file into the database. Moreover, the XML file may be mailed, upon request, to a business partner.

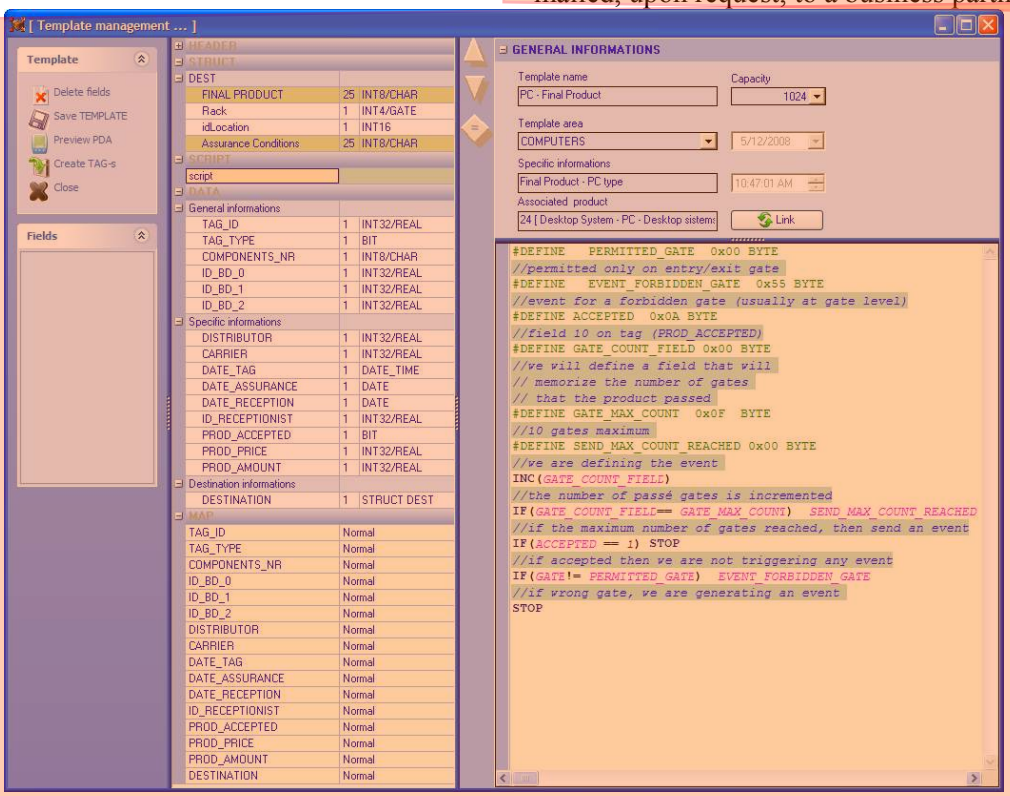

Fig. 2. The script– template PC – final product window

Fig. 3. First and second visual zone on PDA

At the gate level, when a tag is detected in the proximity of an RFID reader, the entire content of the tag is read. Then, the authenticity of the tag is verified and if there are some problems an alarm/ event will be generated. If the tag is correctly authenticated, then the gate will start processing the data requested by the central PC or executing the local script from the tag. Consequently, the gate will read the entire content of the tag and, if necessary, will write new data or just update certain fields. The data read from the tag at the gate level will be sent to the central PC using the communication component that is running there and therefore written into the central database.

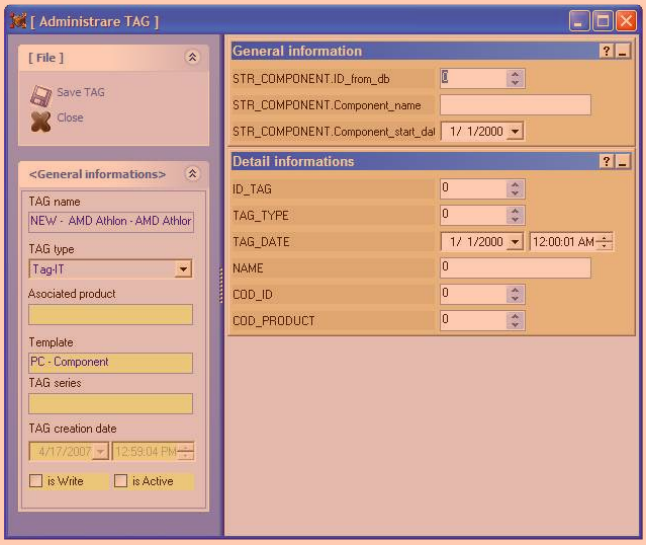

Fig. 4. The window for the motherboard tag

All events generated by the gates are recorded in their internal memory and in the central PC database. At the same time, WEB interface allows the access to several advanced gates. Using the WEB page menu, any authenticated user can consult various reports on the

development of services aimed at enhancing client loyalty and ensuring the rise of sales;

- greater visibility through permanent presence of companies in a virtual market capable of enhancing the development of registered companies;
- the organization of exhibitions and promotion campaigns for products or services in a permanent virtual show-room which facilitates market access;
- a more accurate evaluation of market demands, better management of stocks;
- an error-free environment by using electronic data;
- closely inventory and availability management;
- reducing manual supply chain processes and transaction costs;
- the removal of intermediary agents/companies;
- increasing the amount and type of information that a company share with its partners;
- a faster access to market information and the accumulation of considerable business knowledge among the participants in the virtual market, both qualitatively and quantitatively.

P05

6 Conclusion

In a global market where change is continuous, companies require tools that allow them to respond quickly to new opportunities. The presented RFID_B2B system can be considered as a viable solution for potential problems raised by globalization process, contributing to a significantly more efficient business process. The developed system is flexible and scalable. It allows users to automate routine purchase-order transactions, to reduce the cycle time for purchase-order placement, to reduce errors etc. With this system companies achieve lowering inventory costs, improve operational efficiencies and gain visibility on the market. A company can quickly add new partners and can choose to share more real-time information with its partners.

We can conclude that integrating RFID technologies in B2B applications develop new opportunities for business in the near future.

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