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The IP game, a playful way to amuse and train young people

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ABSTRACT

The Spanish Patent Office identified the need to teach high school students about IP rights. A game to be played on the computer was developed as a classroom tool along with materials for teachers and students. The game replicates the steps required to register an IP right. It was launched to the press in 2007 and by May 2008 it had been downloaded almost 100,000 times.

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1. The need to broaden the scope of dissemination policy of IP towards young people

The Spanish Patent and Trademark Office (SPTO) had, like other European Offices [1], identified the pressing need to target young people as a crucial part of its dissemination policy. The objective was to emphasize to high school students the importance of protecting Industrial Property rights so that these future users became aware of such fundamental issues as the importance of not disclosing an invention before applying for a patent or registering a trademark, trade name or design before acting in the market.

Although relevant material, specifically aimed at young people, had been translated into Spanish (e.g. WIPO brochures) and the SPTO both organized and participated in activities with this age group, attractive and interactive tools to spark their interest in IP issues was lacking.

The SPTO was also conscious of the complexity of the subject and that whatever tool was created, had to be user-friendly and amusing, so that it would not be immediately discarded by the students as “too difficult or tedious”.

2. Working group and method

The SPTO deemed it necessary to elaborate its own IP [2] tool and it did so in collaboration with the EOI Business School, a partner in many initiatives concerning IP. It was agreed that the services of a company (Psitel), specialized in educational psychology and in developing e-learning courses, would be contracted.

On behalf of the SPTO, a team of experts was created. The working method established was to hold joint meetings with the com-

pany; the SPTO team provided the material and the company gave it form.

3. A game

As a result of those joint meetings, the tool that was finally devised was a board game, to be played and accessed via computer. The game was conceived, on the one hand, as a **class tool** aimed at young people, ages 12–18, to be used during a lesson (45 min) and preferably two, to consolidate concepts; and, on the other hand, as a source of abundant **material on IP** to prepare both teachers and students for the game.

The opening screen of this application (see Fig. 1) shows this well: two clear sections appear, one for students (where the game is included) and one for teachers. All the material contained in these two sections is also included in compressed files that can be easily downloaded.

4. Before playing: material for teachers

The subject of IP is not only unfamiliar to students but also to teachers, not being a topic normally taught at an undergraduate level. When designing the game it was considered essential for teachers to have appropriate material to both learn and teach the basic notions of IP rights to students. This enabled the game to carry out, full scope, its educational role.

The material is adapted to the subject matter taught by the teacher (*Economy, Physics and Chemistry, Drawing, Professional Training, Science, Technology and Society, Tutorial and Technology*). If for example (see Fig. 2), the topic of Technology is selected, four distinct sections appear (common to all topics but specifically adapted to each of them):

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Fig. 1. The opening screen of the application.

- **Objectives**, established according to the different levels of education (in Spain there is Compulsory Secondary Education (students ages 12–16) and Baccalaureate (students ages 16–18)).
- **Teacher's Guide**, which includes instructions, recommendations and answers to all the material available for students.
- **Learning Material**, containing two PowerPoint® presentations on IP rights (basic and advanced) for teachers to use in class.
- **Insertion in Curricula**, outlines suggestions for teachers on how to incorporate the IP material in their yearly program.

5. Ready to play: material for students

As for students, the three options that exist are:

- The game
- Curious data
- Self-evaluation

5.1. The game

The game, as was stated before, is the star element and the reason for developing this application. Albert Einstein is in charge of

welcoming the player, explaining the rules and leading him throughout the game.

5.1.1. Format

The game is inspired by the games of snakes and ladders and Monopoly®. The board (see Fig. 3) is composed of 38 squares divided into different coloured districts, each of which corresponds to an industrial property right (patent, utility model, trademark, trade name [3] and industrial designs districts).

5.1.2. Rules of the game

The player starts out with **300 credits** and a **sealed envelope**, virtually handed by Einstein to the player, **containing the IP right** to be registered (see Fig. 4). As the player goes round the 38 squares of the board, s/he has to answer questions on patents, utility models, trademarks, trade names and designs. The aim of the game is to reach the finishing line (the SPTO's headquarters). At that moment, the envelope is opened and the IP right is disclosed. In order to win the game, the player must correctly determine what type of IP right it is and have enough credits to register it.

5.1.3. Structure

The game follows a structure that can be summarized in five points:

- **Explanation of the IP right:** every time the player falls for the first time in a district, Einstein explains the most salient aspects of each right.
- **Entrance fee:** each time the player falls on a square s/he must always pay a fee.
- **Benefits:** information is given to the player on the number of credits a player can win for every correct answer.



Fig. 2. The four distinct sections within the topic of technology.



Fig. 3. The board for the game.

- **Questions:** all related to IP rights- among others, true or false questions, crossword, trademark or design puzzles, deciding whether a product is a patent or utility model, pairing trademarks with products-.The player must find the answers to some questions on the internet. As in the Monopoly®, there are also special squares (lucky, cinema, lottery, prison. . .) It is important to note that the questions must be answered within a limited time. (see Fig. 5).
- **Results:** the screen shows the player's final credit balance after answering questions or completing an activity.

5.1.4. Class dynamics

The best way to make use of this computer game is by creating different class groups. As was said before, time is a decisive factor for winning the game. The group that wins is the first one who registers the IP right correctly. The idea is to replicate the real steps involved in registering an IP right. That is why an imitation of an IP right application is produced at the finishing line (SPTO headquarters), which includes the exact time, including seconds.

As can be seen in Fig. 6, the player correctly determined that "Scot-tex" was a trademark, and had the 500 credits (reaching the finishing line with 755) needed to apply for the trademark.

5.2. Curious data and self-evaluation

The two other interesting options for students are: *curious data* about each of the different IP rights as well as a list of web pages related to IP issues; and *self-evaluation* which contains basic and advanced tests for the student to assess if they have understood and learnt the key IP concepts.

6. Launch of the game

On March 14th, 2007, the first game on IP issues (see Fig. 7), was officially presented to the press by the Director of the SPTO, the EOI Business School and a Member of the Ministry of Education, as a didactic tool to increase the awareness of high school students in matters concerning IP rights. A week after, a demonstration of the game before the TV cameras took place in a Madrid high school classroom.



Fig. 4. The player receives a virtual sealed envelope.

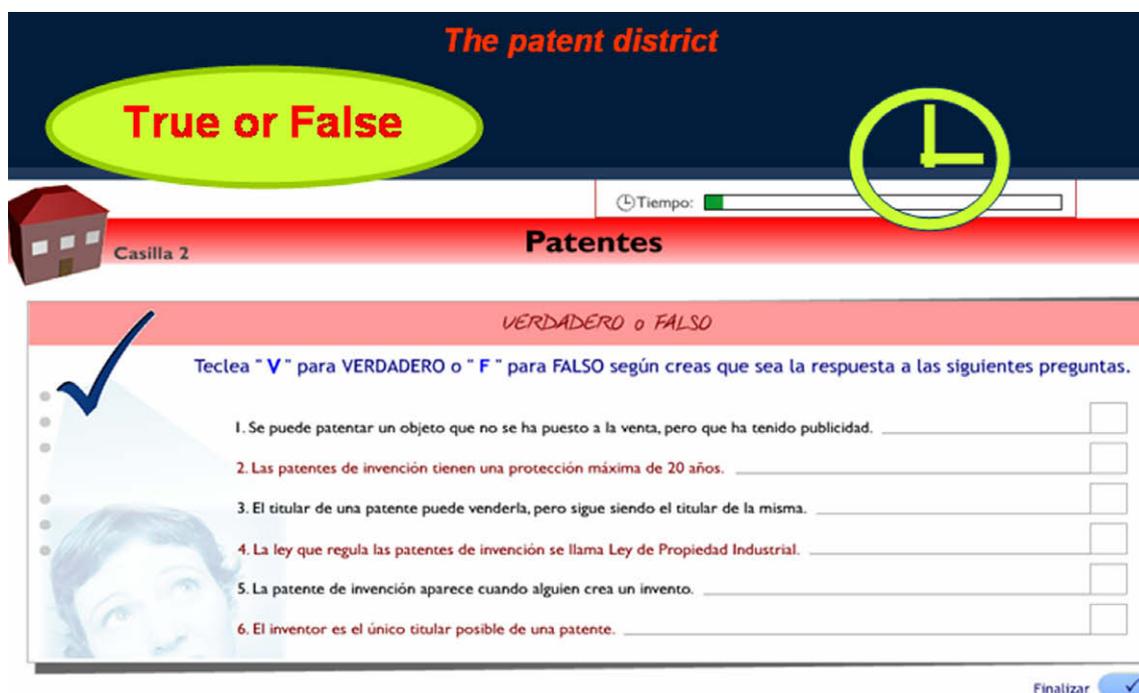


Fig. 5. The questions must be answered within a limited time.

7. Permanent address: the SPTO'S website

The main concern regarding the dissemination of the game was for it to be easily accessed by the largest amount of people. To that end, the SPTO's website (www.oepm.es Section: "Get to

know us- Industrial Property Education and Training") was decided to be the best location and therefore the game's permanent residence.

The number of game downloads shows its success: 57,232 in 2007 and a further 36,531 until May 2008.



Fig. 6. The finishing line.



Fig. 7. The IP game as officially presented to the press.

8. A relevant experience starring: the game, teachers, high school students and an SPTO examiner

In order to prepare for the 2008 Madrid Science Fair, a major science event for children and young people, the SPTO started working with a Madrid high school class of 17 year-old high school students from the technology branch and their drawing and technology teachers. As a starter, an SPTO patent examiner and former high school teacher, gave both teachers and students a class about the most important notions on IP rights. The teachers afterwards, making use of the PowerPoint® presentations downloadable in the section for teachers of the game, reviewed in class all the IP rights. For the students it was vital to understand the concepts well since they were going to be the ones in charge of the stand at the Fair and of playing with the attendees (children, young people and even adults) most of whom would have very little knowledge of IP. This was challenging; it motivated the students to practice in class and at home.

Once at the Fair, they became conscious of how important all their previous work had been as they supported and assisted the players at the large touch screen installed at the stand with the game. (see Fig. 8).

Aside from the fact that this group of students became completely familiar with IP concepts, the number of game downloads from the SPTO's webpage doubled in number after the Science Fair.

9. Conclusions

- Young people are a key target group for any IP dissemination policy.
- The tools to be used for attracting their interest in IP issues have to be user-friendly, dynamic and easily accessible via internet.



Fig. 8. The game at the 2008 Madrid Science Fair.

- It is of especial interest, as experience shows, to involve young people in projects where they become the main actors and where knowledge of the subject matter (IP in our case) is a crucial element.
- The IP game has proven to be a very successful tool, as the number of downloads from the SPTO's website shows. It is both an encouraging indication of the positive response from young people as well as of the convenience of following this line of action and developing it further.

Acknowledgement

This article has been developed from the author's presentation at the PATLIB Conference in May 2008 in Warsaw.

References

- [1] Morgan D. THINK kit: educating tomorrow's innovators. *World Patent Information* 2006;28(2):136–9.
- [2] It must be noted that reference to IP in this article excludes copyright. This is due to the fact that in Spain a clear distinction is made between industrial property (patents and utility models, distinctive signs and designs) and intellectual property (copyright). The SPTO is only competent to award industrial property rights and does not deal with matters related to copyright.
- [3] The difference between a trademark and a trade name is that the trademark serves to distinguish the goods and services of a company from those of its competitor while the trade name's purpose is to identify a company in the market and to distinguish it from that of other companies that carry out the same or similar activities.



Lara Ferguson Vázquez de Parga began working for the Spanish Patent and Trademark Office in the year 2000. A Law graduate, specialized in European Community Law, she had previously worked for different Law firms in Madrid. The first post she held at the Office was at the Appeals Unit, as Legal Expert, moving on to the Dissemination Department in 2006, where she is currently involved in the elaboration of appealing teaching material aimed at raising awareness of the importance of IP protection and its dissemination.