Football and Euro 2016 from the point of view of industrial property

Observatory for Intellectual Property

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SUMMARY

This study takes a look at football from the point of view of industrial property. Data concerning patents, trademarks and designs are a value source of information.

The various industrial property rights mentioned (trademarks, patents and designs) identified in this study allow their owners to protect their interests. It is a way of setting up sales agreements, especially licences, to develop a strong sales activity around football, especially during this Euro 2016. These IP rights also allow their owners to assert their rights by protecting themselves against counterfeiting.

In terms of innovation, every aspect of football is being modernised constantly: the game, the player's equipment, the pitch, the refereeing, monitoring of the player, etc. All these inventions help reduce the risks of making bad decisions, optimise the player's performance and improve the game conditions for the player. However, a large number of invention patents in the field of football also relate to the playful aspects of the game. The emergence of "E football" is dominant, international competitions are now organised with virtual football games, broadcast on television, on the Internet. For this Euro 2016, all the publishers are releasing game versions based on the reality of the participating teams.

Apart from patents, logos protected by trademarks and designs are everywhere in the competition, even on the players' shirts.

Some key figures:

- 1778 inventions (first patent filings) related to football were published from 2000 to 2014
- 30 % were published in European IP offices
- Nike is well ahead in the sector, with over 800 patent families
- More than 30 trademark applications (national, EU, international) have been filed on the Euro 2016 trademark
- 14 Community designs have been filed on "Super Victor" in his various positions

Most football inventions are filed in:

- furniture, games, pitches, other consumer goods (lawns, manufacturing, repair, etc.)
- the equipment (studs, boots, gloves, player protections, etc.)
- audiovisual (inventions around the match, displays, advertising, flags, etc.)
- computer techniques, control (analysis, communication, IT, connectivity, refereeing, etc.)
- measurement techniques (training, movement, data, measurement, magnetic fields, etc.)

INTRODUCTION

Football is a sport with extensive media coverage, creating interest from the general public, companies, politicians and is highly coveted.

Major international competitions are organised every two years alternately: UEFA European Championship, FIFA World Cup. This year, the UEFA Euro 2016 final takes place in France. It is the occasion for INPI to watch the event using the information held in the IP databases.

Football, a tremendously popular game, combined with a renowned competition offer international visibility. Big companies seize the opportunity to extend their popularity by being seen and by supporting the competition organisers, as well as the national teams. During the event, they are and will be omnipresent, in competition, at the training, in press conference, on the billboards, at half time…

But these partners do not just display their trademarks. This competition is also an outstanding showcase. It allows each equipment vendor, every innovating company, in and around sport, to display its ability to innovate, offer increasingly efficient products, more in-depth analyses… We also speak of Big Data in sport: each performance, whether collective or individual, is analysed from every aspect, less and less is left to chance. Connected objects and video are an integral part of training, the competition and refereeing, and now affect the trainer's strategy and choices.

Football is no longer only on the field, innovations have emerged over the last few years and "E football" has also become a competition. With the internet, game consoles and tablets the virtual world has swept into homes. Major players innovate in this field and propose increasingly realistic products, where the player is immersed more and more. This Euro also represents for them the opportunity to propose products in phase with the competition, the players who will be present there.

This document describes, firstly, the innovations in football seen by the patents, then secondly attempts to portray the symbols which accompany this Euro 2016 in France and the national teams present during this Euro.

INVENTIONS IN FOOTBALL

In this section, all patent applications published without priority whose title or summary contains key words related to football are considered as an invention in football. American football and Australian football are excluded from the perimeter studied. Queries are made in the EPO PATSTAT database. The study period spans from 2000 to 2014.

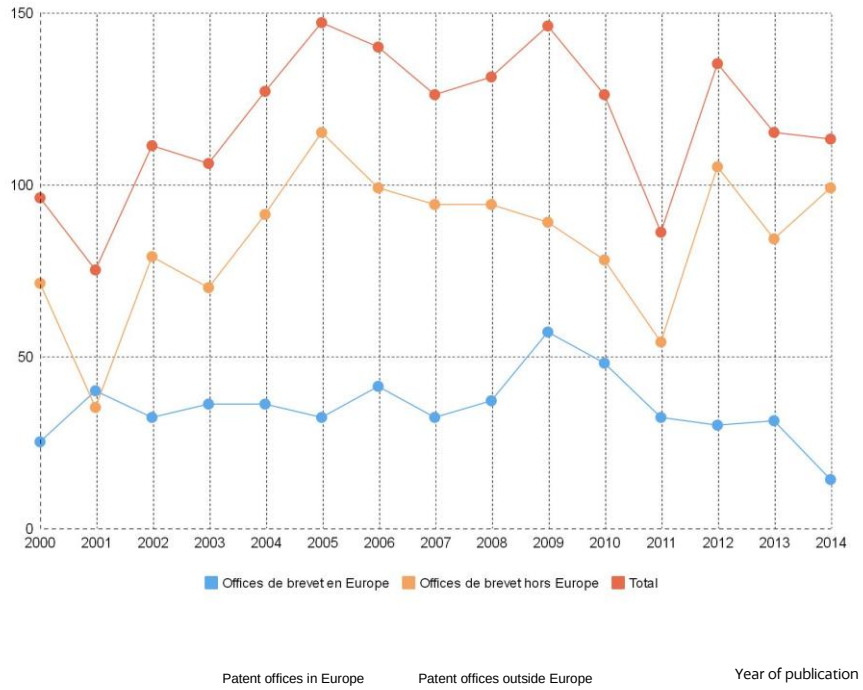
The counts have been made on the basis of fractional counts. The fractional count is part of a contribution logic, where the contributions of each player to each patent application are fractionated to obtain sums equal to 100 % over all the players. The principle is also applied to the distribution of a patent application between several technological fields.

What is the trend of inventions in football? What is the position of the European offices concerning protection of inventions in football compared with the rest of the world?

Since 2000, the curve showing the trend in publications of the first filings in football (graph 1) is chaotic. At world level for example, we observe a constant trend of inventions from 2001 to 2005, increasing from 75 to 147 inventions. From 2005 to 2009, the number of inventions in football stagnates before falling until 2011, reaching 86 inventions before picking up again in 2012 with 135 inventions. For offices outside Europe, we see that the peaks are related to sporting events:

- ✓ in 2005, the year before the World Cup in Germany
- ✓ in 2009, the year after the European Cup in Austria and Switzerland
- ✓ in 2012, the year of the European Cup in Ukraine and Poland

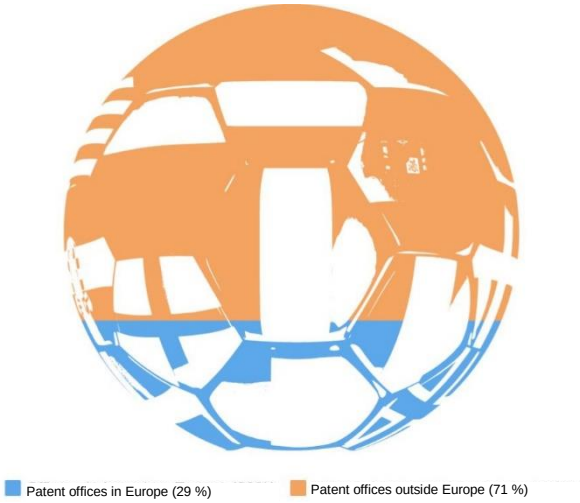
Graph 1: Publications of the first patent filings over the years depending on publishing office – Source PATSTAT database, INPI processing, 2016



If we compare Europe with the rest of the world, we see a difference in behaviour concerning the protection of inventions in football. For European offices, this sawtooth effect observed in the rest of the world is less pronounced, even though the number of inventions has dropped slightly over the last few years. This can be attributed to the fact that the main players of inventions in football are American, Chinese and Japanese. They tend

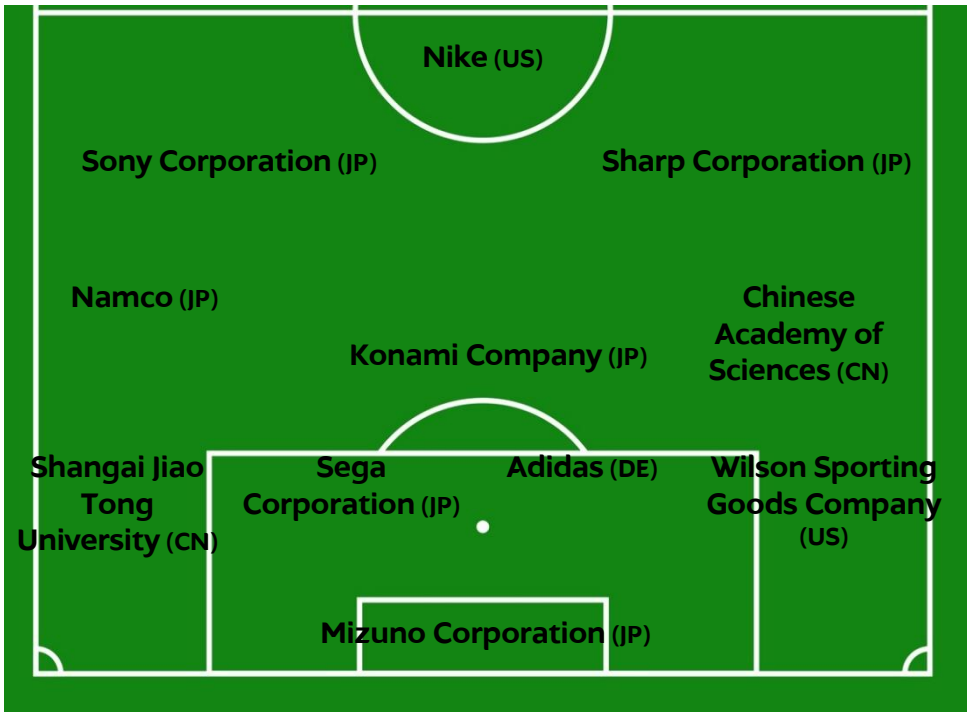
to publish their first filing in their respective offices before extending it afterwards to the other offices (graph 3). The proportion of inventions outside Europe is therefore greater than that of Europe. Since 2000 in fact, one out of three inventions is published in a European office.

On average, every year (graph 2), 35 first filings were published in European patent offices as compared with 84 in the non-European offices (graph 4).



Graph 2: Proportion of publications of the first patent filings depending on publishing office – Source PATSTAT database, INPI processing, 2016

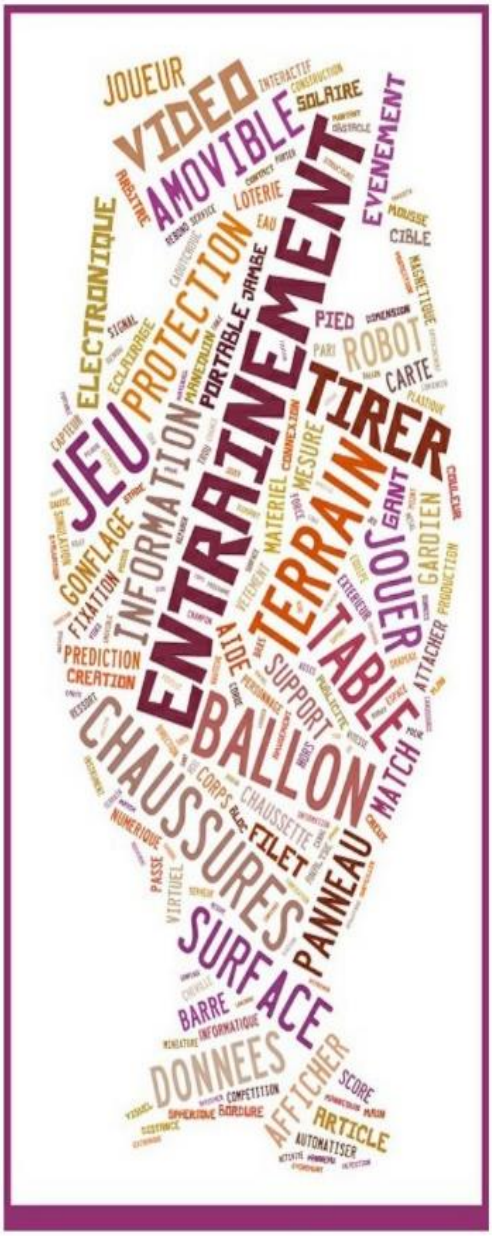
Graph 3: Football innovation players – Source PATSTAT database, INPI processing, 2016



Graph 4: Europe vs Rest of the world: mean number of football patent publications per year – Source PATSTAT database, INPI processing, 2016

35

84



Graph 5: Football inventions – Source PATSTAT database, INPI processing, 2016
Cloud of words obtained from Patstat abstracts, and French translation

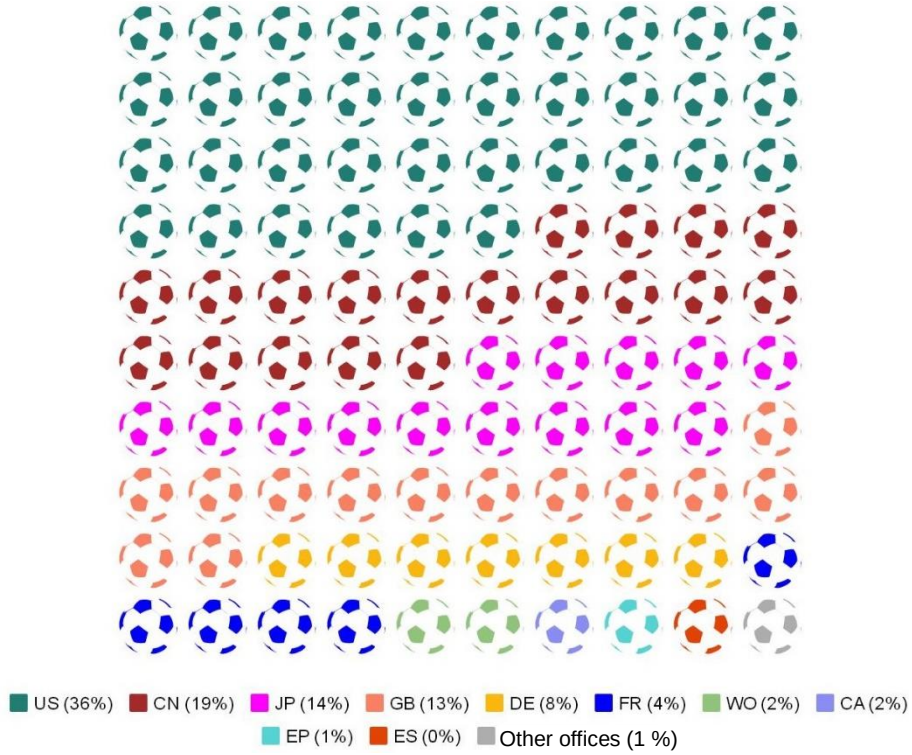
What do the football inventions concern?

Since 2000, inventions in football relate to training, the pitch, balls, boots, as well as the game (on the pitch, board games, video games, etc.), electronics, information processing and video (graph 5). All the strata around football are clearly identified. We find everything related to sport itself, with the strips, the pitch, training, the ball, etc. With the emergence of Big Data, inventions are made around the data collected, IT and digital technology, to analyse the players' performance. During competitions, numerous arguments concerning refereeing arise, in particular regarding whether or not a goal was scored. Consequently, we find numerous inventions related to refereeing, video and the goal. Lastly, apart from the sport itself, numerous inventions are related to video games, board games, cards and outdoor games. This explains the predominance of applicants such as Sony, Sharp, Namco and Sega.

The first filings in football are published mainly in the American, Chinese, Japanese and British IP offices (graph 6). The INPI represents 4 % of the first football filings in the world and is the 6th office, behind the German office, with 8 %. Out of these main offices, we observe that several of them have their own specificities regarding the inventions protected (graph 7):

- ✓ In the US office, inventions on clothing, construction, amusement and simulation
- ✓ In the UK office, inventions on the goal, the game, the pitch and the stadium
- ✓ In the French and German offices, inventions on IT, electronics and analysis
- ✓ In the Chinese office, inventions on the sensors, the ball, equipment and refereeing
- ✓ In the Japanese office, inventions on the lottery and the players

Graph 6: Distribution of football inventions, since 2000 according to the patent application publishing offices – Source PATSTAT database, INPI processing, 2016

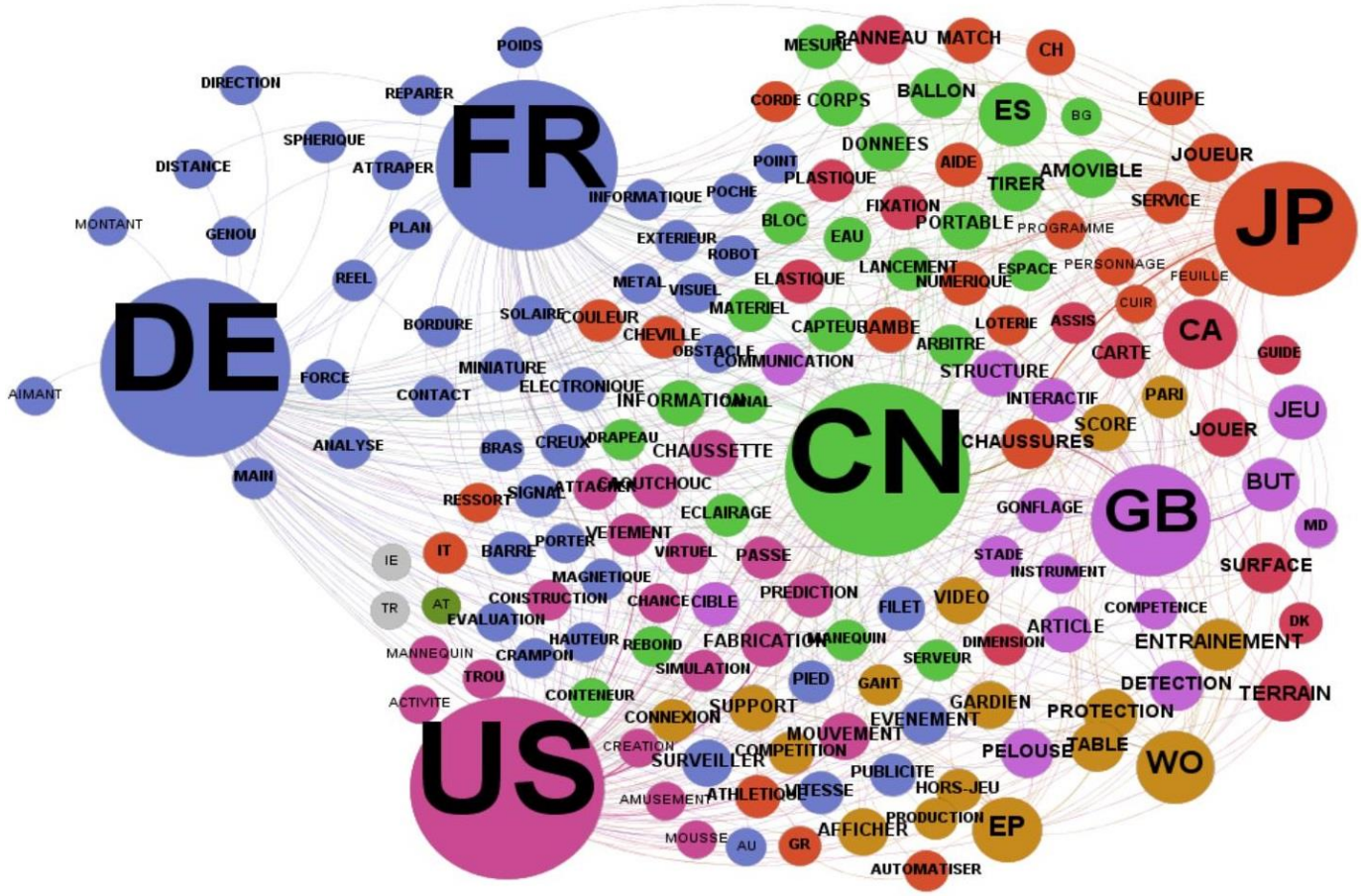


To which technical fields do football inventions in Europe correspond?

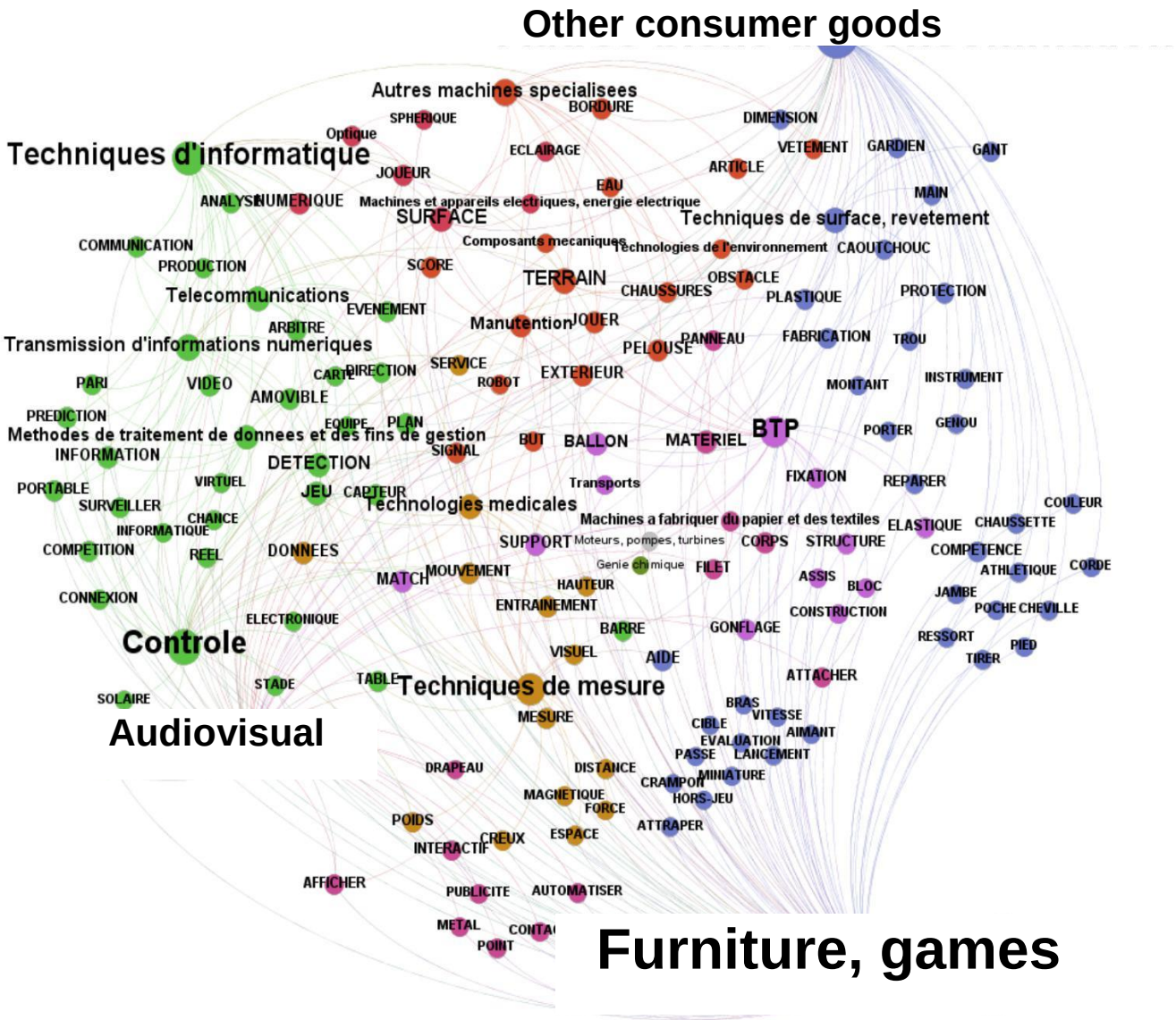
Most football inventions are filed in:

- furniture, games, other consumer goods (on manufacturing, gloves, repair, speed, studs, offsides, etc.)
- audiovisual (inventions around the match, displays, advertising, flags, etc.)
- computer techniques, control (analysis, communication, IT, connectivity)
- measurement techniques (training, movement, data, measurement, magnetic fields, etc.)

Graph 7: Links between football inventions and patent application publishing offices
– Source PATSTAT database, Gephi tool, INPI processing, 2016



Graph 8: **Link between football inventions in Europe and the technical sub-fields**
– Source PATSTAT database, Gephi tool, INPI processing, 2016



The technological specialisation index is defined as the relation between two ratios:

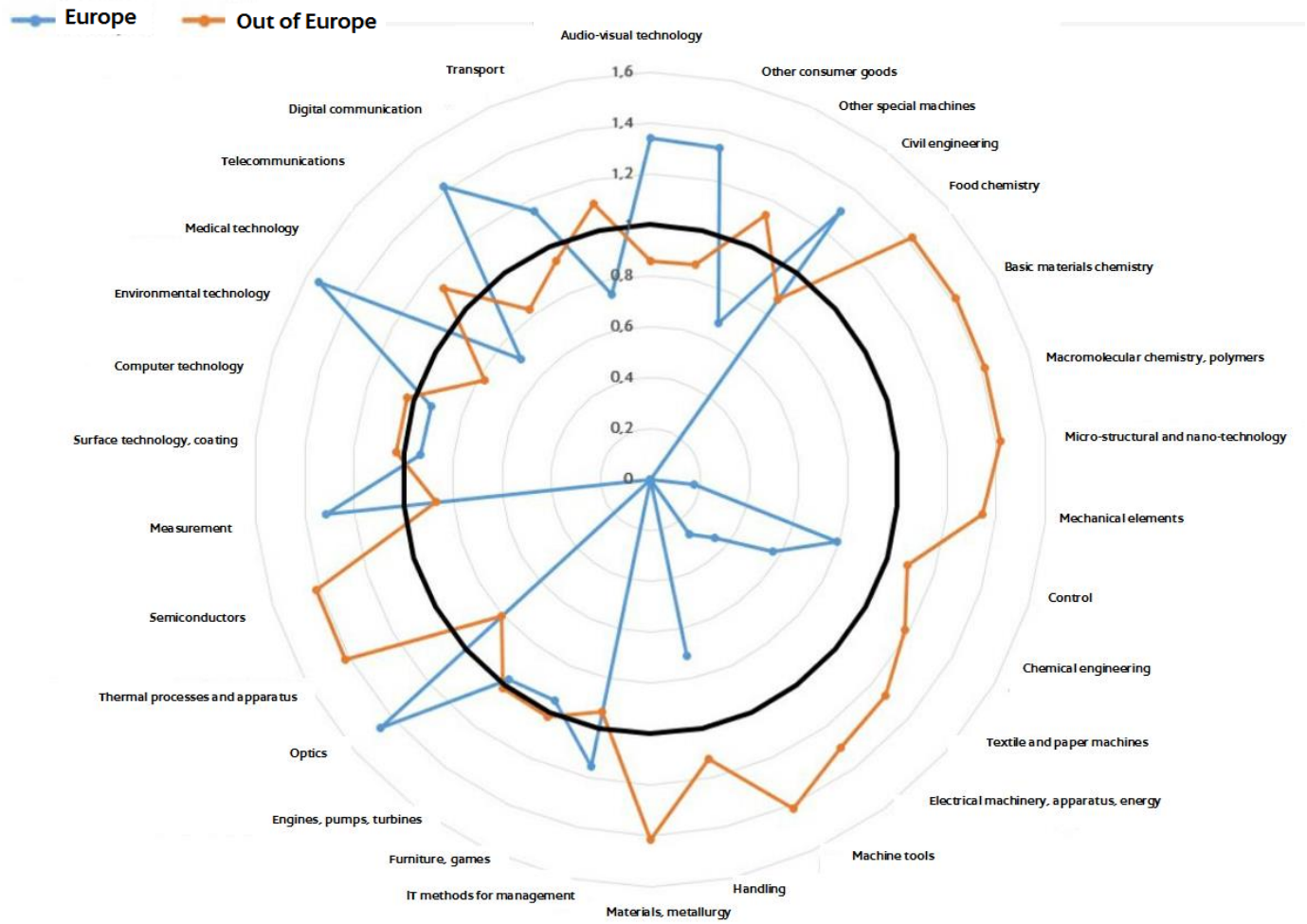
- the number of patent applications published by economic player A in a technological field X compared with the number of applications published by economic player A in all technological fields
- the number of patent applications published by French legal entities in a technological field X compared with the number of applications published by French legal entities in all technological fields.

The more the specialisation index is greater than 1, the more the economic player studied is specialised in the technological field concerned.

Are the specialisations of the European patent offices different from those of the other offices?

European patent offices are specialised in the environment, optical, telecommunication and audiovisual technologies. The other offices are specialised in materials, metallurgy, machine tools, thermal processes and apparatus (graph 9). In Europe, the German, British and French offices have different specialisation indices. Germany is present in virtually all technical fields. The British office is specialised in electronics and electricity, while France is specialised in instrumentation (graph 10).

Graph 9: Specialisation of patent offices in the technical sub-fields, for football inventions
– Source PATSTAT database, INPI processing, 2016

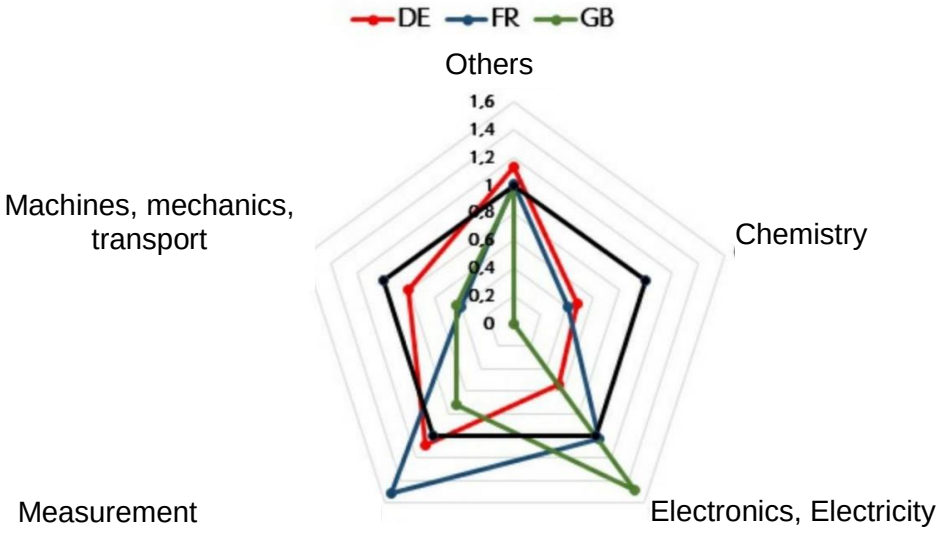


Note for the reader: **The more the specialisation index is greater tha**Outside Europe **e economic player studied is specialised in the technological field concerned.**

The technological specialisation index is defined as the relation between two ratios:

- the number of patent applications published by economic player A in a technological field X compared with the number of applications published by economic player A in all technological fields
- the number of patent applications published by French legal entities in a technological field X compared with the number of applications published by French legal entities in all technological fields

Graph 10: Specialisation of French, German and British offices in the technical fields, for football inventions
– Source PATSTAT database, INPI processing, 2016



Hybrid or synthetic lawn?

Wear of natural turf has lead to the filing of numerous patent applications relating to synthetic or hybrid lawns.

Hybrid lawn:

Several technologies have been developed: either natural grass is injected with thousands of synthetic fibres as at the Stade de France, Parc des Princes and Guingamp stadium as well as at Le Havre and Nantes (GrassMaster method by the Dutch company *Desso*); or the grass takes root in a substrate combining fine sand, bark granules and synthetic microfibres as at the Troyes Aube Stadium and eight other League 1 and League 2 stadiums (AirFibr patent by the French company NaturalGrass).
Source: http://www.lequipe.fr/Football/Article/L-hybride-impose-son-jeu/643976

A Desso GrassMaster® hybrid grass pitch consists of natural lawn reinforced with millions of Desso synthetic grass fibres (Figure 1).
Using a patented technique, specialised installers inject 20 million Desso artificial turf fibres 20 cm deep in a natural grass mat.
The natural grass roots grow and intertwine with the synthetic fibres.
The result: a high-tech, stable pitch that can take 3 times more playing than a normal, natural grass pitch.

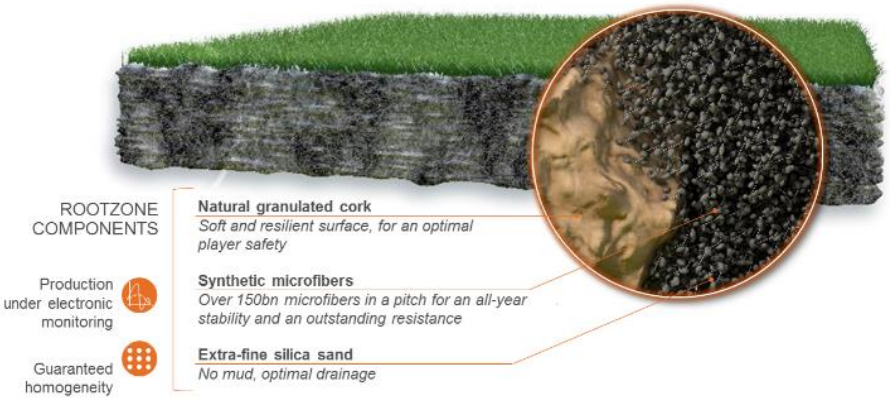
Figure 1: Principle of the hybrid lawn

Source : http://www.sportsmarketing.fr/stade-de-france-pelouse-desso-sports-systems/

A NaturalGrass hybrid grass pitch is 100 % natural lawn rooted in an artificial substrate combining fine sand, bark granules and synthetic microfibres, AirFibr is the latent patented innovation (FR2960383) by NaturalGrass in the field of hybrid sports pitches (Figure 2).

Patent FR2960383 describes a substrate intended to act as a cultivation support in particular for natural grass in order to produce a sport surface acceptable for all sports activities. Said substrate is highly resistant, very soft, very draining, frost resistant and not affected by very heavy rainfall.

Figure 2: Zoom on the hybrid lawn substrate

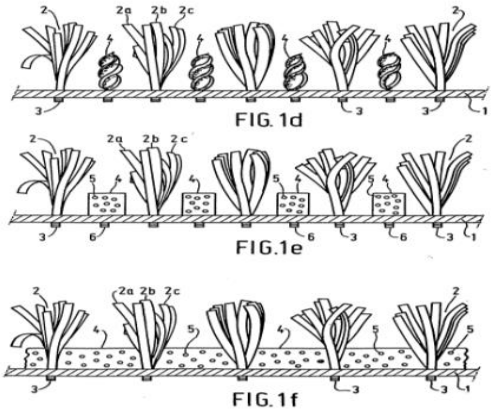


Source :http://www.naturalgrass.com/produit/la-technologie-airfibr/

Synthetic lawn:

Company TenCate Grass innovating in the sector of synthetic grass was granted European patent EP1290279 for an artificial lawn suitable for sports fields with fibres of different lengths and shapes and having humidity regulation properties.

Figure 3: Diagram extracted from patent EP1290279, relating to a synthetic lawn



Company Desso Sports Systems, already mentioned, also filed an international patent application WO2013009174 relating to an innovation for an artificial lawn, which comprises a top layer of artificial grass fibres and a substrate comprising a number of individual layers, some being composed of sand.

Goal line technology

To determine whether or not the ball has actually crossed the goal line in some doubtful situations during the Euro 2016, the referees will be able to use a "Goal line technology" system.
Various technologies have been developed and corresponding patent applications filed.

Company Hawk Eye, a subsidiary of Sony Corporation is the owner of patent US2013121538. This solution was chosen by the UEFA to check the validity of a goal. For several years now, Hawk Eye has proposed solutions of this type in other sports, in particular tennis and cricket.

Figure 4: Diagram extracted from patent US20130121538, relating to the goal line technology

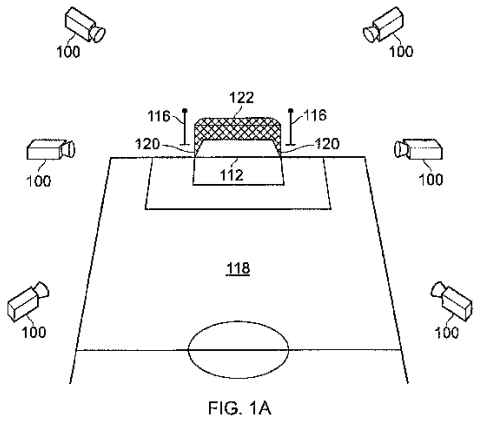
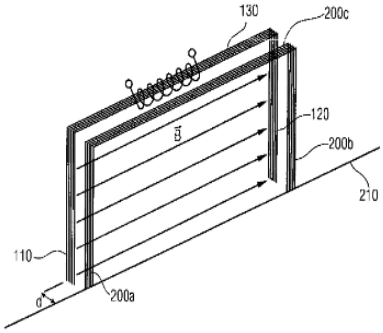


FIG. 1A

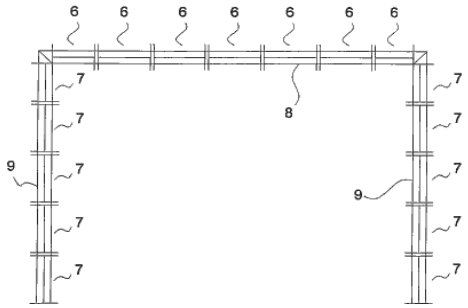
The German company Cairos Technologies AG filed an international patent application WO2008043443 for a system which uses a magnetic field applied on the goal line, a sensor inside the ball measures the magnetic field and sends a signal to the referee via a computer when the goal line is crossed.

Figure 5: Diagram extracted from patent WO2008043443, relating to the goal line technology



The German company Fraunhofer-Gesellschaft is the owner of European patent EP1855766 relating to a system which uses wave transmission means for detecting whether a movable object, such as a football, has crossed the goal line. Said system encircles the goal plane using conductors producing an electromagnetic field to excite signal emitting means in the movable object or alternatively to detect the signal emitted by said means.

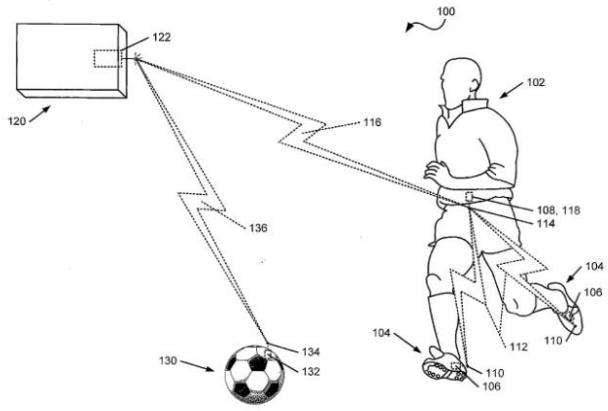
Figure 6: Diagram extracted from patent EP1855766, relating to the goal line technology



Athletic performance monitoring

Industrial property is also used by athletes. The world famous company Nike is extremely active in the field of patents and in particular for an athletic performance monitoring system and method in a team sport environment such as football. European patent EP2370186 describes a system for monitoring the motion of a game ball comprising a gas pressure sensor inside the ball, an inertial sensor for detecting changes in ball motion and a ball motion monitoring system, as well as use of the system for determining an out of bounds event, a restart of play event by a throw in event or a kick event or ball possession time.

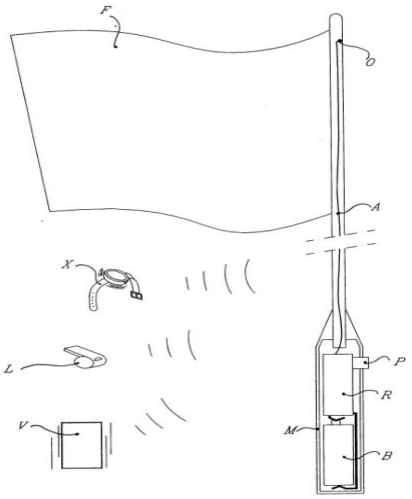
Figure 7: Diagram extracted from patent EP2370186 relating to the connected ball



Offside flag

Refereeing is also concerned by industrial property. For example, European patent application EP678837 describes the use of a transmitter in the linesman's flag activating a referee-worn receiver having vibrating or acoustic outputs.

Figure 8: Diagram extracted from patent EP678837 relating to refereeing



PATENTS RELATING TO FOOTBALL THROUGHOUT THE WORLD

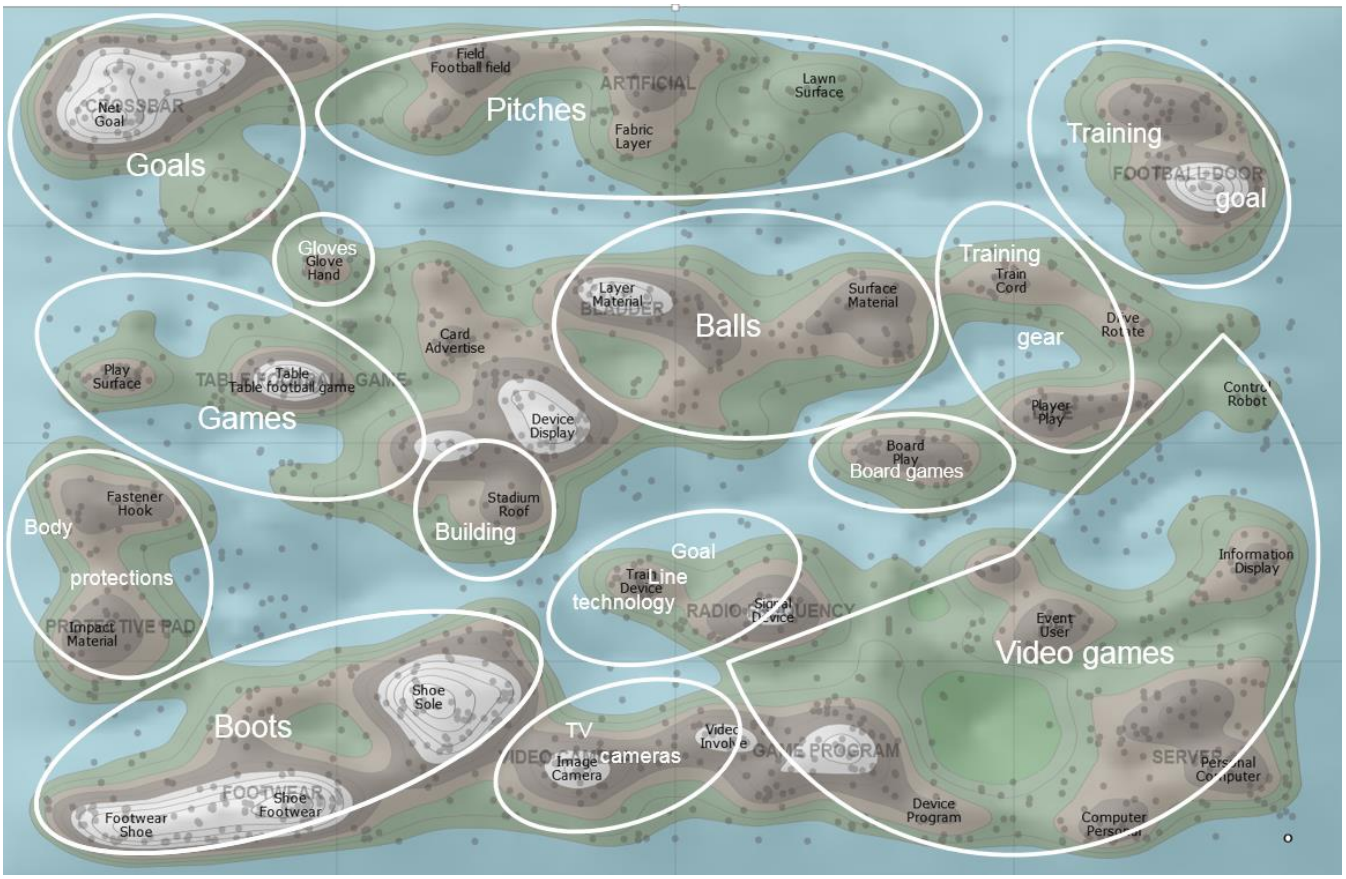
For this analysis, patents relating to football are identified by the presence of football keywords[1] in the title and/or the abstract of the applications published, with no time limit. Patents relating to American and Australian football are excluded. Queries are made in the Derwent World Patent Index (DWPI) database developed by Thomson Reuters. The graphic and map representations are generated using the Thomson Innovation tool and data processing is carried out by the INPI.

30 051 patents grouped in 13 214 families have been identified.

Since a family of patents is a set of patents with the same priority, each of these patents is indicated by a dot. Patent applications are grouped on the map by the occurrence of the keywords present in the DWPI title and abstract. Recurrent keywords are displayed on the map. Patent applications of similar content are placed next to each other. The topographic curves transcribe the density of the patents, the colour shading changing with the density. The white peaks indicate a high concentration of patent applications.

[1] Football keywords are a set of terms relating to football used to target patents in the industrial property databases

Figure 9: General map of inventions relating to football throughout the world, identification of the main fields

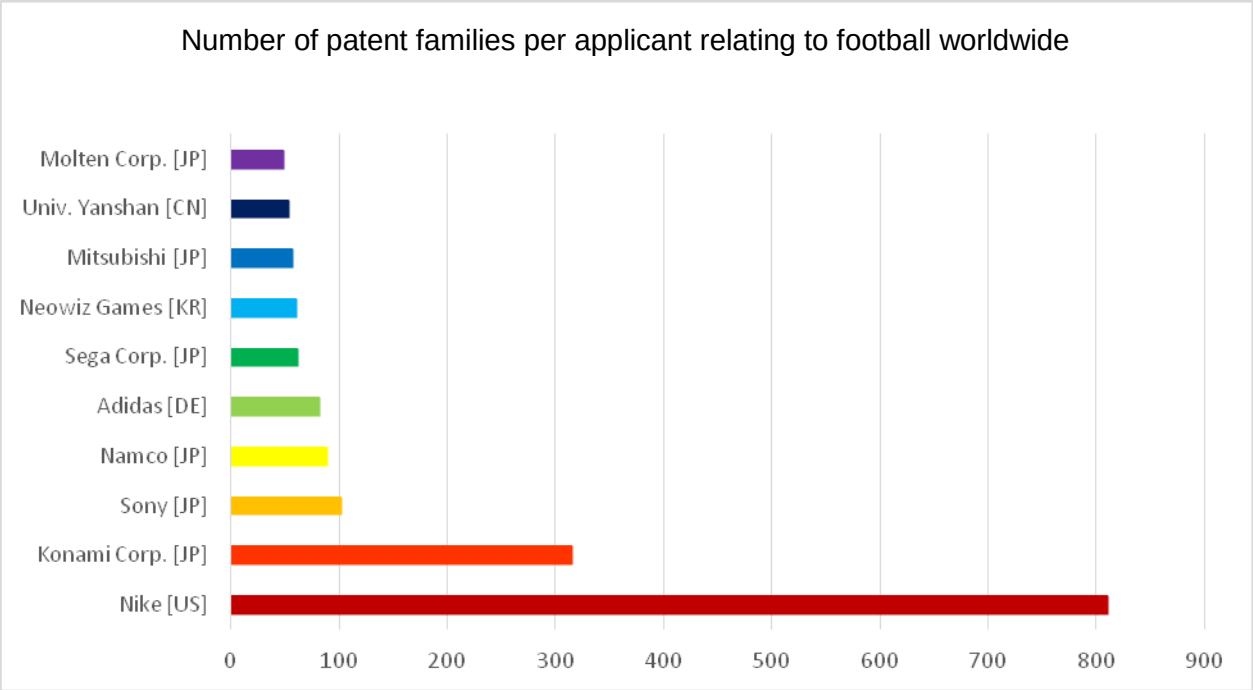


Source Thomson Innovation, INPI processing, June 2016

The map shows 13 214 families of patent applications published relating to football innovations. By looking at the map, we can draw regions grouping the main innovations, in particular boots, balls, goals, pitches, games, etc.

The peaks of highest density relate to boot and goal technologies. Note the high number of patent families in the derived field of games (video games, game tables, board games, etc.).

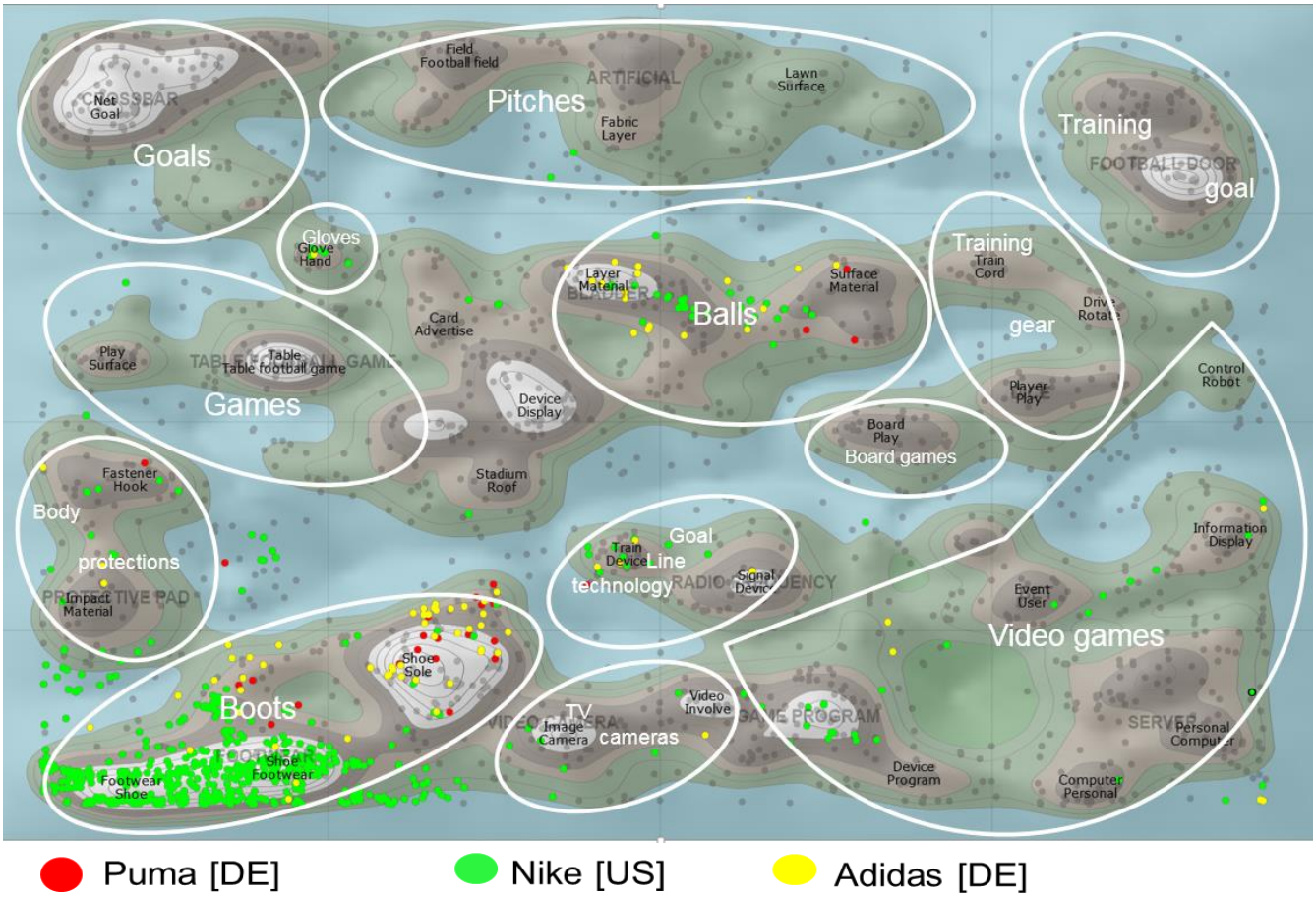
Graph 11: Top 10 of the main football-related patent portfolios



Source Thomson Innovation, INPI processing, June 2016

This histogram shows the number of patent families held by the ten main companies in the field of football: the equipment vendor Nike is well ahead in the sector with more than 800 patent families, with the European equipment vendor Adidas in fifth position. The United States and Japan stand as clear leaders.

Figure 10: Map showing three football equipment vendors across the world



Source Thomson Innovation, INPI processing, June 2016

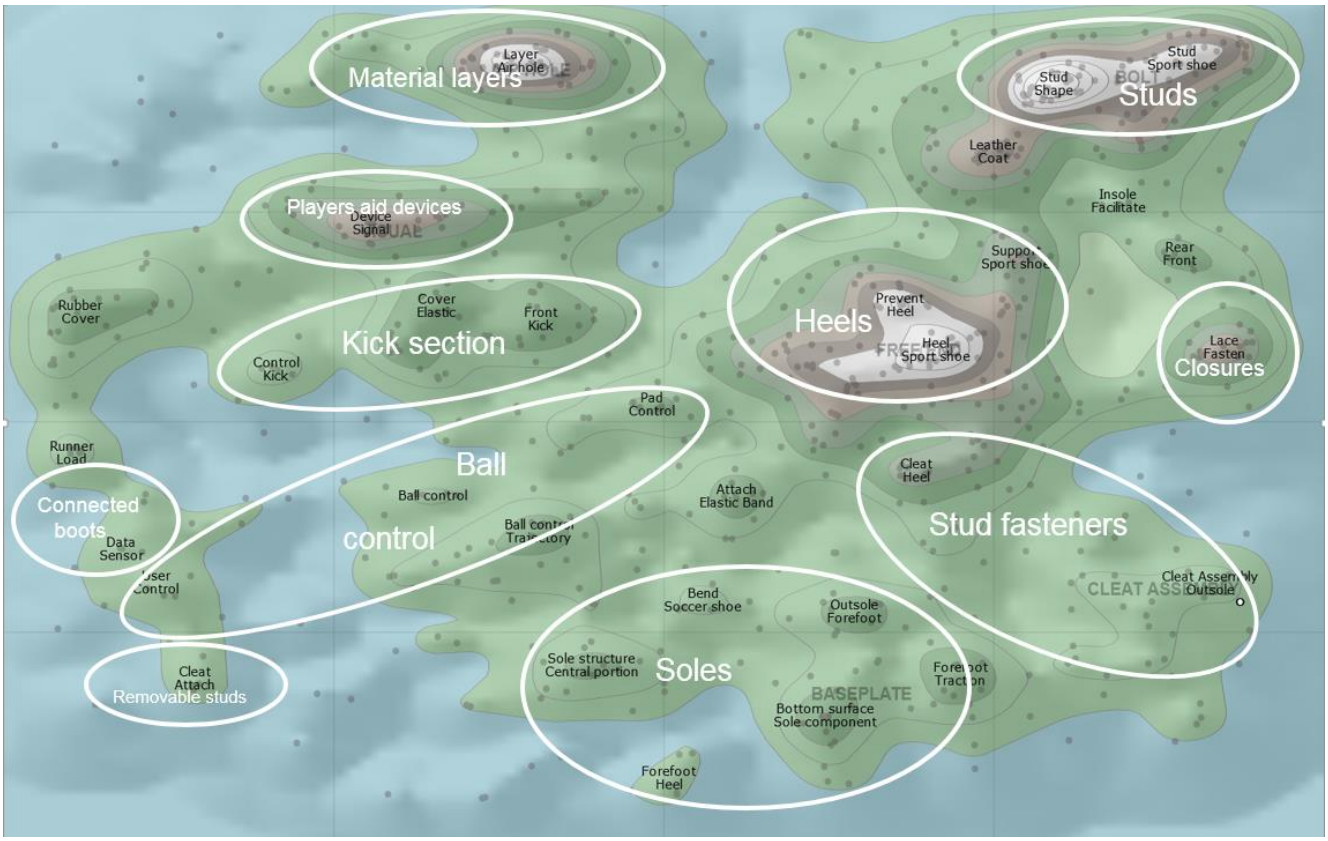
The ranking of the three main equipment vendors, Nike, Adidas and Puma, on the world map shows that these companies innovate mainly in the field of boots and footballs.

Figure 11: Football boots over the years

For this analysis, the patents relating to football boots are chosen on the basis of the International Patent Classification (IPC) A63B05/02. Queries are made in the Derwent World Patent Index (DWPI) database developed by Thomson Reuters. Data processing carried out by the INPI identified 2421 patent applications published grouped in 779 DWPI families.

The patent applications published are indicated on a map by dots, the concentration of dots is represented by a topography by level lines, the white peaks indicate a high concentration of patents.

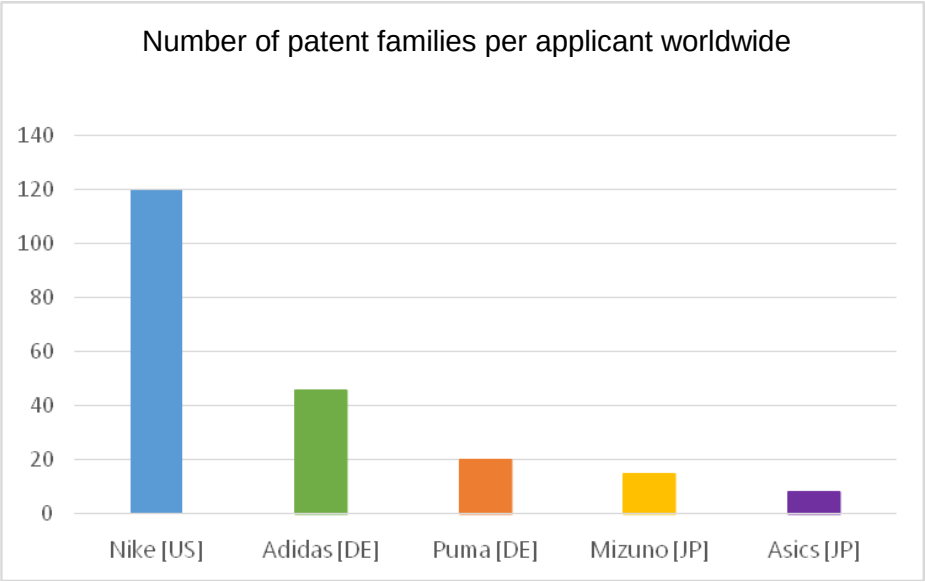
Figure 12: Inventions by main fields relating to football boots



Source Thomson Innovation, INPI processing, June 2016

Various innovations are highlighted. The peaks of highest density relate to the fields of heels, studs and material layers.

Graph 12: Top 5 patent portfolios relating to football boots

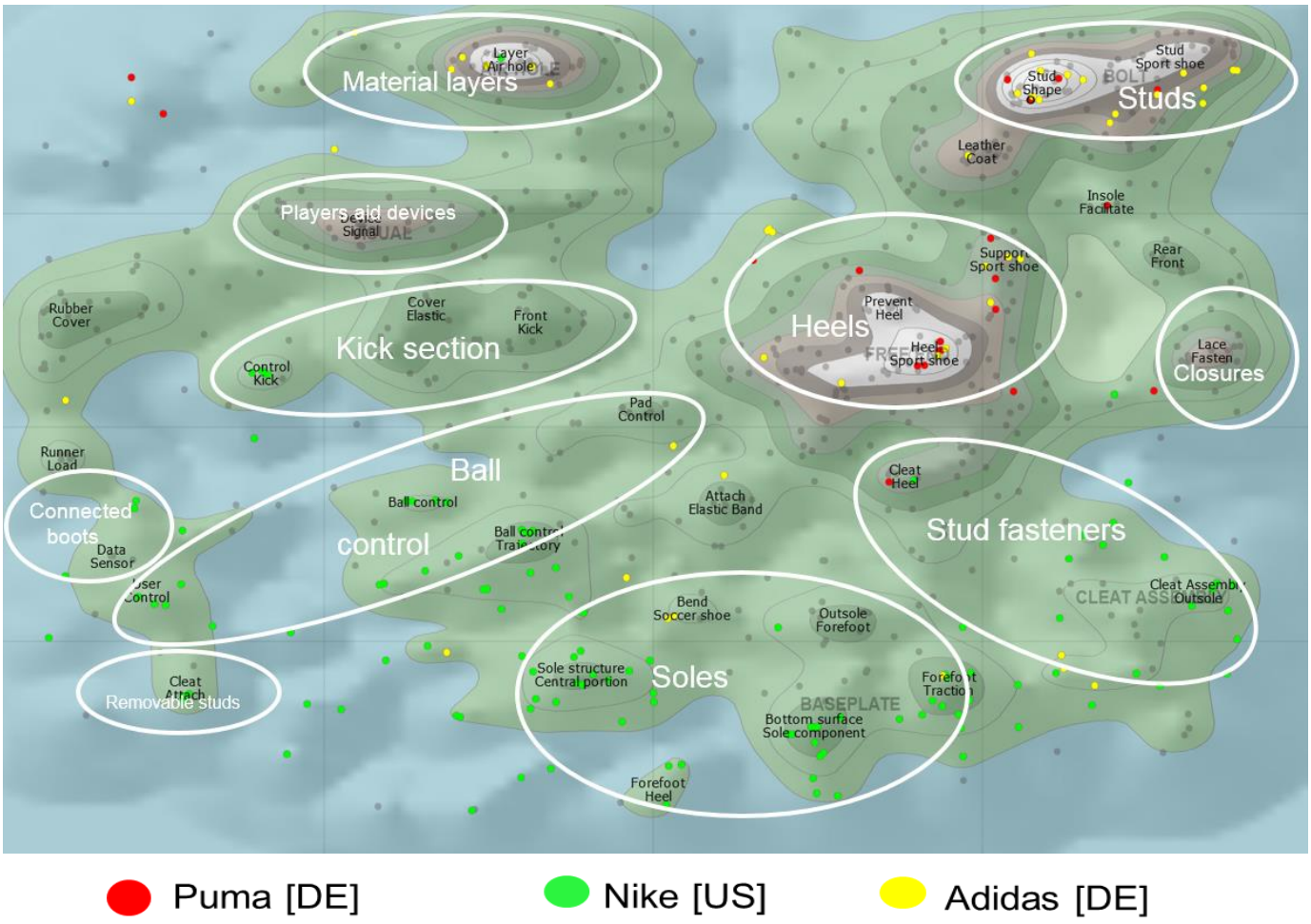


Source Thomson Innovation, INPI processing, June 2016

The American equipment vendor Nike is well ahead with 120 DWPI patent families. The two German companies Adidas (46 families) and Puma (20 families) are ahead of the Japanese companies Mizuno and Asics.

Figure 13: Map showing three equipment vendors in the field of football boots throughout the world

The tool also allows selection of certain players only, to display the specialisations of their patent portfolios.



Source Thomson Innovation, INPI processing, June 2016

The ranking of the three main companies on the map shows that the equipment vendor Nike innovates mainly in the soles and the morphology of the football boot used to control the ball, while Adidas and Puma focus more on the heel and the studs.

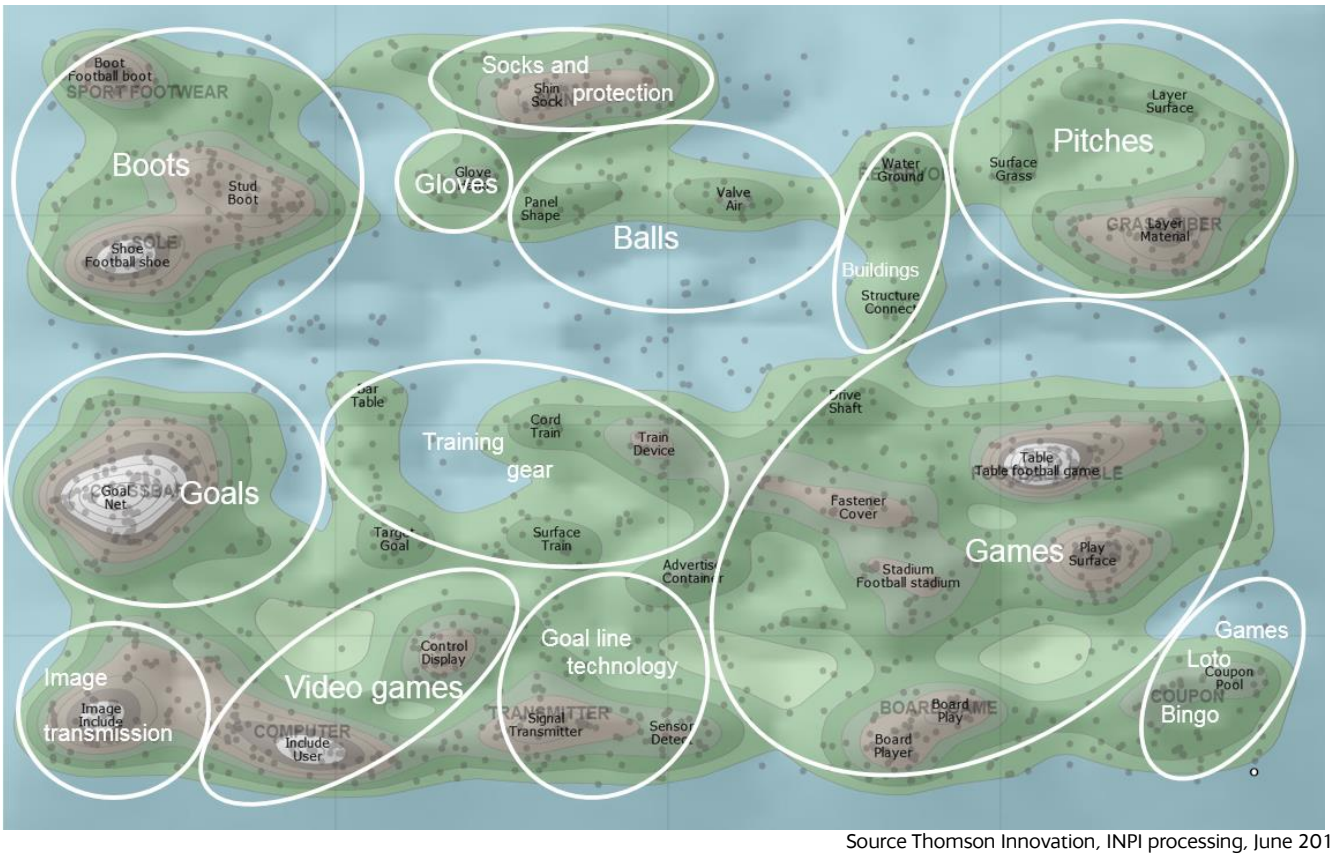
Figure 14: the 54 countries which took part in the qualifying rounds to play in the EURO 2016

Group A		Group B		Group C		Group D		Group E		Group F	
Pos	Team	Pos	Team	Pos	Team	Pos	Team	Pos	Team	Pos	Team
A1	France	B1	England	C1	Germany	D1	Spain	E1	Belgium	F1	Portugal
A2	Romania	B2	Russia	C2	Ukraine	D2	Czech Republic	E2	Italy	F2	Iceland
A3	Albania	B3	Wales	C3	Poland	D3	Turkey	E3	Republic of Ireland	F3	Austria
A4	Switzerland	B4	Slovakia	C4	Northern Ireland	D4	Croatia	E4	Sweden	F4	Hungary

Source: https://en.wikipedia.org/wiki/UEFA_Euro_2016

For this analysis, patents relating to football are identified by the presence of football keywords in the title and/or the abstract of the applications published in each of the above countries, and for which the first priority results from one of these countries, together with the published applications made directly via the European (EP) or international (WO) system by an applicant or an inventor residing in one of these countries. Patents relating to American and Australian football are excluded. Queries are made in the Derwent World Patent Index (DWPI) database developed by Thomson Reuters. Data processing carried out by the INPI identified 8505 patent applications grouped in 3483 families.

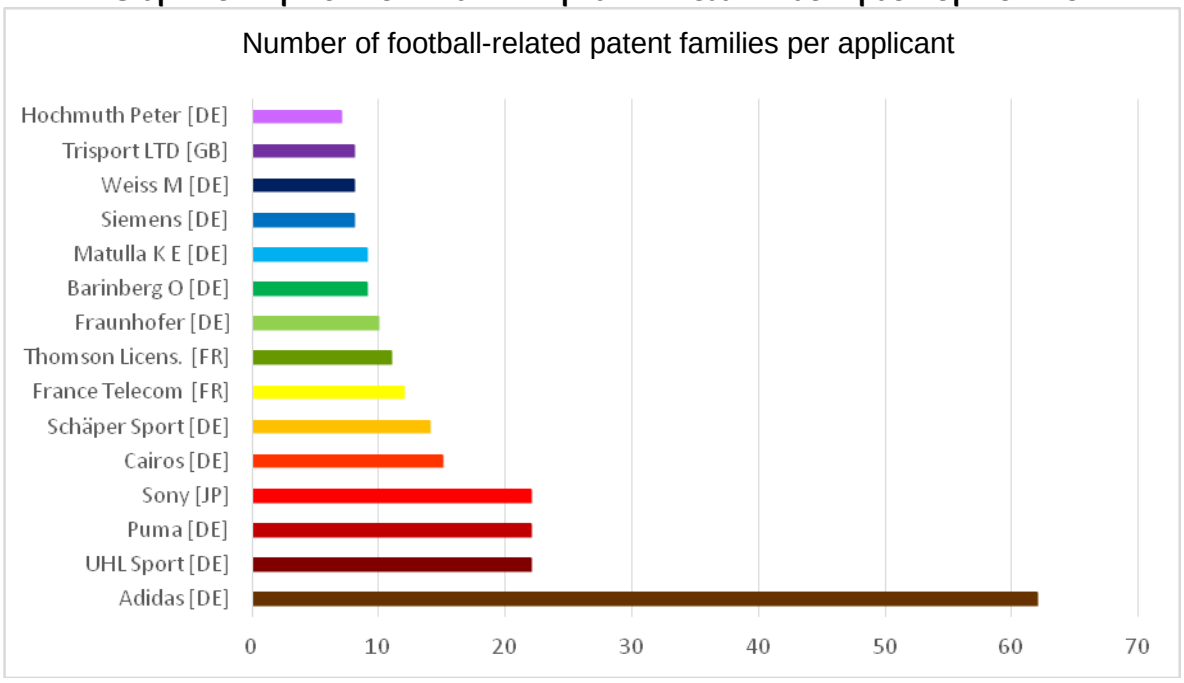
Figure 15: distribution by fields of patents relating to the 54 countries which took part in the Euro 2016 qualifying rounds



Source Thomson Innovation, INPI processing, June 2016

The peak with the highest density in patent applications relates to the goal technology. Note also the high number of patent application families in the derived field of games (video games, game tables, board games, etc.).

Graph 13: Top 15 of the main European* football-related patent portfolios



Source Thomson Innovation, INPI processing, June 2016

*European: in the 54 countries of the Euro 2016 qualifying rounds

The German companies are the most represented (10/15), Adidas is the most innovating with 62 patent families. Two French companies rank seventh and eighth, respectively France Telecom and Thomson Licensing (now respectively Orange and Technicolor). Although Japanese, Sony is included in the classification since the company is filing its first patent applications in the United Kingdom.

The following maps show the ranking of these fifteen players in their fields of innovation.

Figure 16: Map of patents filed by the main equipment vendors

Source Thomson Innovation, INPI processing, June 2016

We see that a large majority of these patents is related to boots.

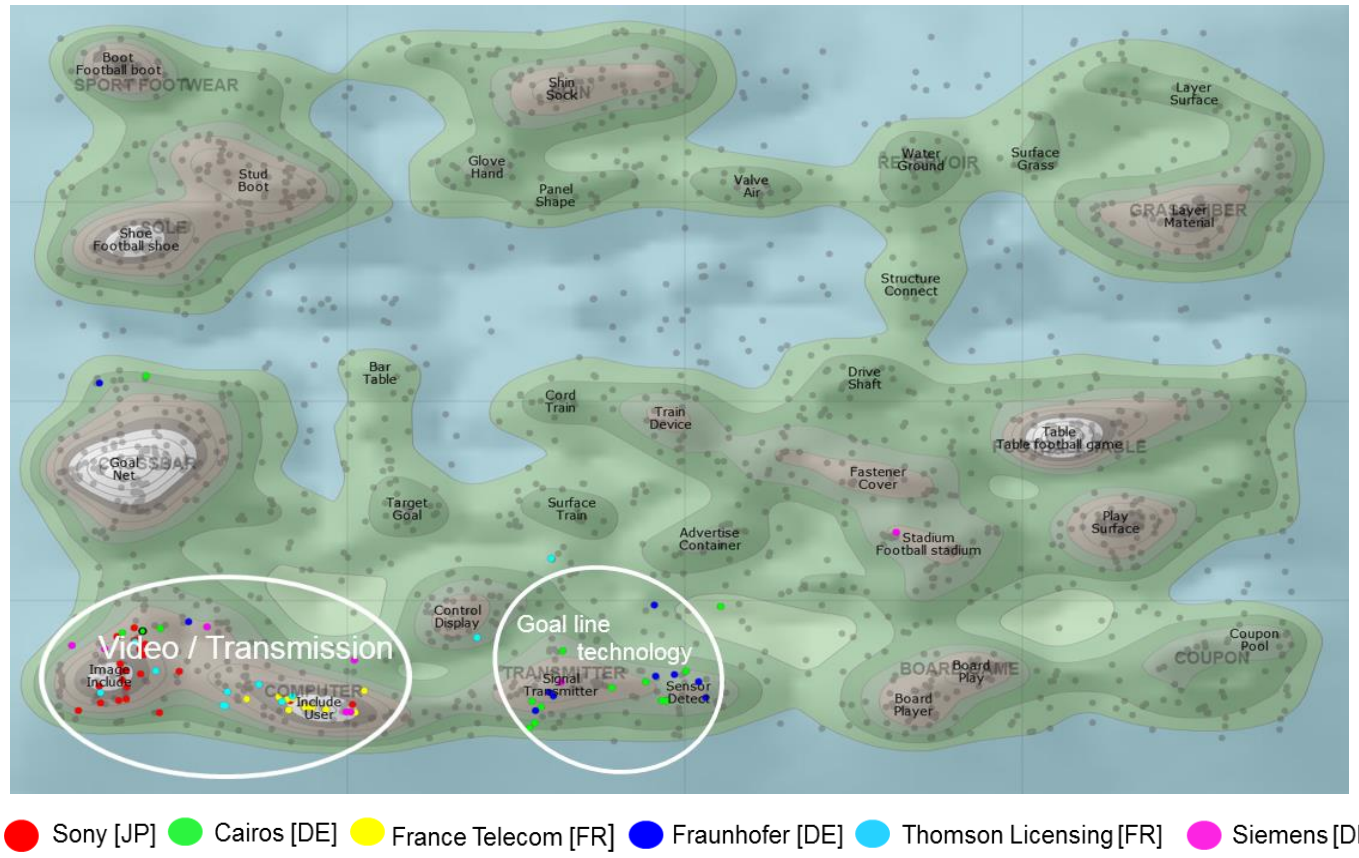
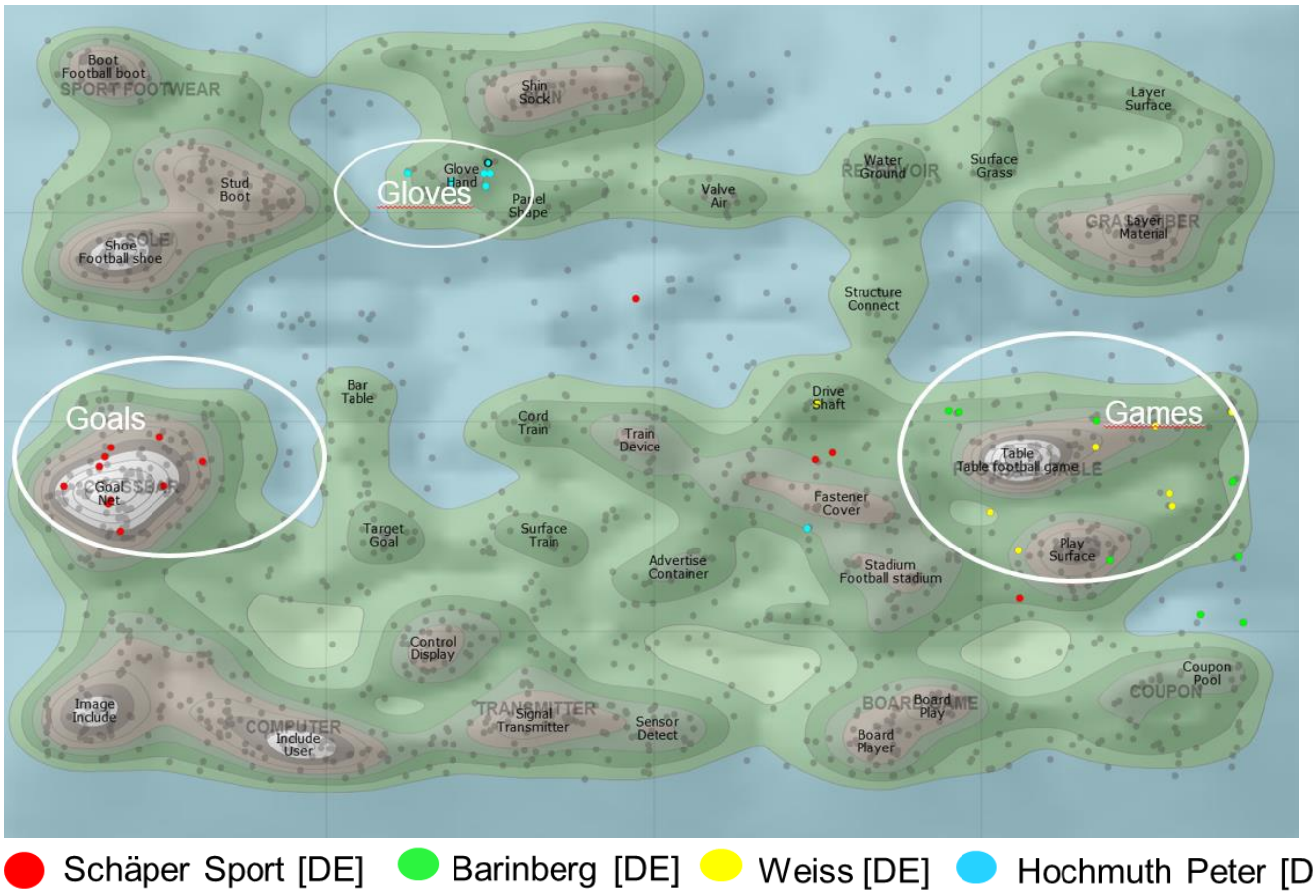


Figure 17: map of applicants specialised in goal line, video/transmission

Source Thomson Innovation, INPI processing, 2016

This second map highlights six applicants specialised in the field of transmission and electronics. Sony, France Telecom, Thomson Licensing and Siemens mainly file applications in the video/transmission sector while Cairos and Fraunhofer focus mainly on the goal line technology sector.

Figure 18: map of applicants specialised in goals, gloves and games



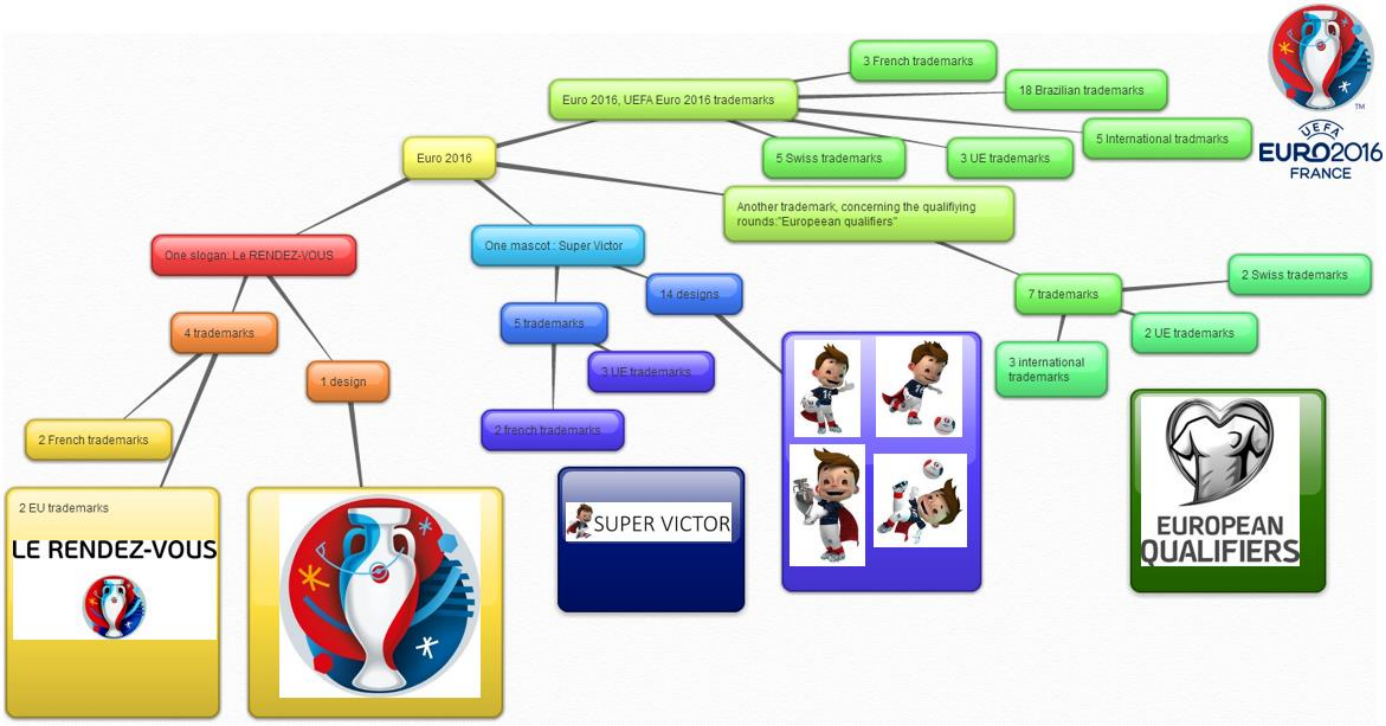
Source Thomson Innovation, INPI processing, June 2016

This map highlights four German applicants: Schäper Sport specialised in goals, Barinberg and Weiss specialised in games and Hochmuth Peter specialised in gloves.

UEFA, EURO 2016; ITS TRADEMARKS AND DESIGNS

The UEFA has protected numerous items based on the Euro 2016. Industrial property is used and 4 main items are protected by trademarks and designs that are sometimes registered nationally (France, Switzerland, etc.), but often at EU level and in some cases internationally.

Figure 19: Applications for trademarks and designs associated with the Euro 2016



Source: Edital and DesignView databases, INPI processing, 2016

Euro 2016: the trademark

More than 30 trademarks have been filed (national, EU and international trademarks). Each trademark designates numerous classes of goods and services (Nice classification). The applications include semi-figurative, figurative and word trademarks.

Source: Edital database, INPI processing, 2016

The slogan: "Le rendez-vous"

LE RENDEZ-VOUS

The slogan is also protected by no less than 4 EU and French semi-figurative, figurative and word trademarks.

Source: Edital database, INPI processing, 2016

The logo

Protected as a design, it expresses the beauty and passion of the game.
It is protected as Community design under No. 002195941-0001
It is displayed everywhere around the Euro 2016, on flags, documents, advertisements, the ball, the shirts, etc.
Source: DesignView database, INPI processing, 2016

The other logo: "European qualifiers"

Less well known but also displayed on the official Euro ball, it concerns the Euro 2016 qualifying rounds in which every European country took part (except France, qualified automatically as organising country). It is also protected by 7 international, EU or Swiss trademarks. Once again, these trademarks are semi-figurative, figurative and word trademarks.

Source: Edital database, INPI processing, 2016

The mascot: "Super Victor"

Each competition organised by the UEFA has its own mascot. For the Euro 2016 in France, the mascot is Super Victor. 14 Community designs have been filed on Super Victor, in his various positions. However, "Super Victor" is also protected by several French or EU trademarks.

Source: Edital and DesignView databases, INPI processing, 2016

Super Victor in his various positions (the various designs filed)

Figure 20: The various positions of Super Victor filed as designs

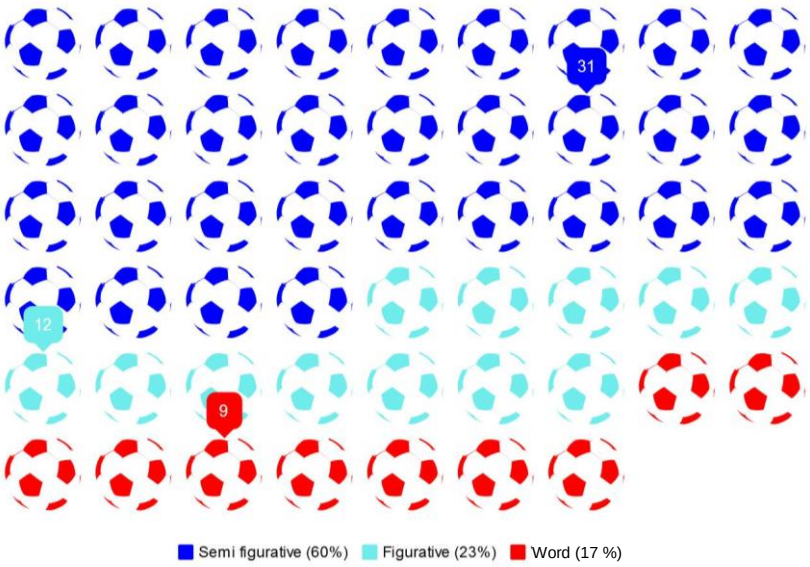
Community design No.
002555961-0002
002567909-0003
002567909-0008
002567909-0002
002567909-0004
002567909-0006
002567909-0005
002567909-0010
002567909-0009
002567909-0007
002567909-0011
002555961-0003
002567909-0001
002555961-0001

Source: DesignView database, INPI processing, 2016

Summary of the UEFA Euro 2016 trademarks:

The following figure shows all the national, EU and international trademarks in force and owned by the UEFA concerning the Euro 2016. It does not include the numerous other trademarks owned by the UEFA. Each colour corresponds to a trademark type out of the three possibilities: figurative, semi-figurative and word trademark. We see that the UEFA has a clear preference for the semi-figurative trademarks, in other words those including a graphic part associated with text.

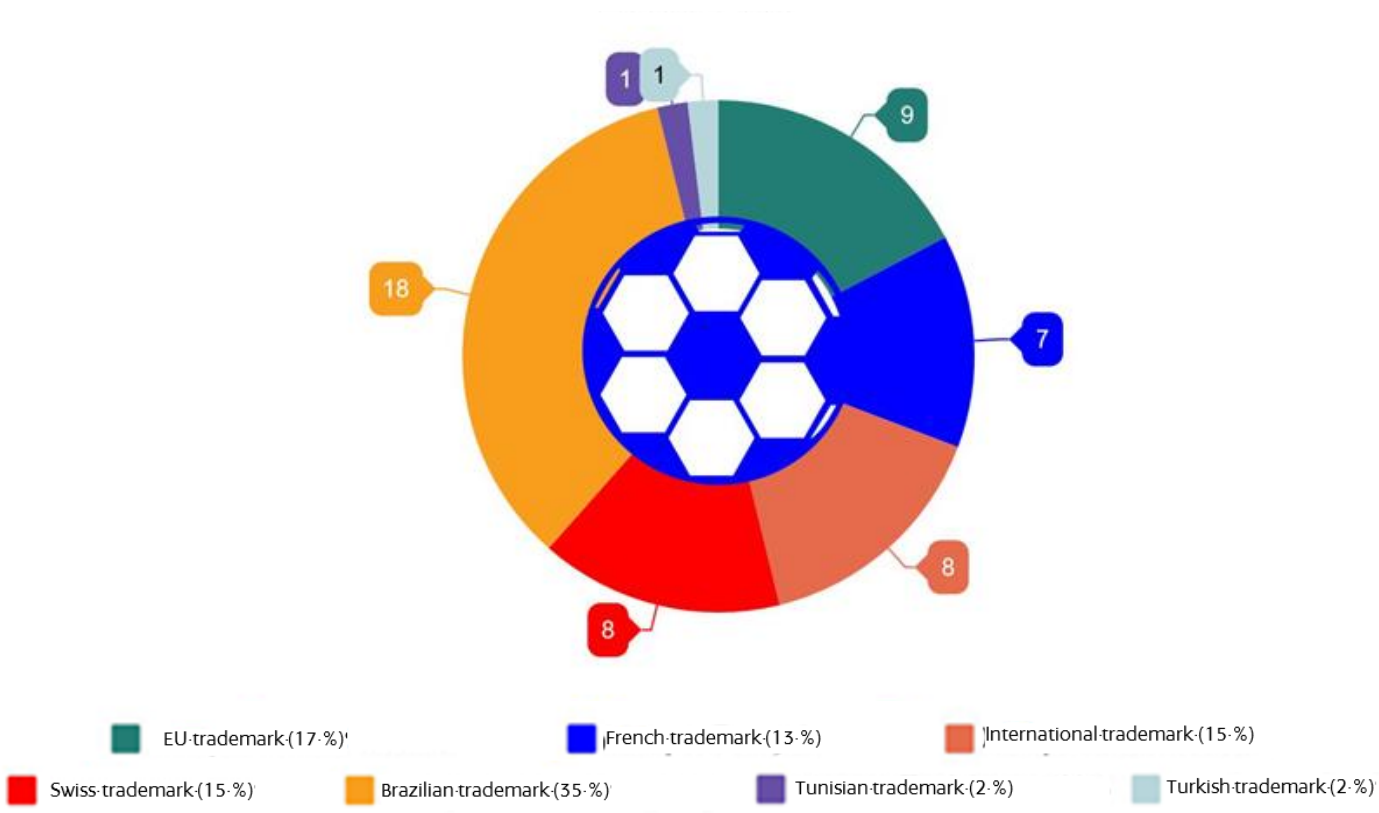
Graph 14: Distribution of Euro 2016 trademark types



Source:Edital database, INPI processing, 2016

Various types of application, whether at national, EU or international level, have been filed for the Euro 2016 trademarks owned by the UEFA. The following figure shows the distribution between these filing routes. For national applications, each country in which a trademark has been filed is represented. Applications relating to the items outlined above in the study have been taken into account (the slogan, Euro 2016, the Super Victor and European Qualifiers logos, etc.).

Graph 15: Distribution of Euro 2016 trademark applications by trademark type

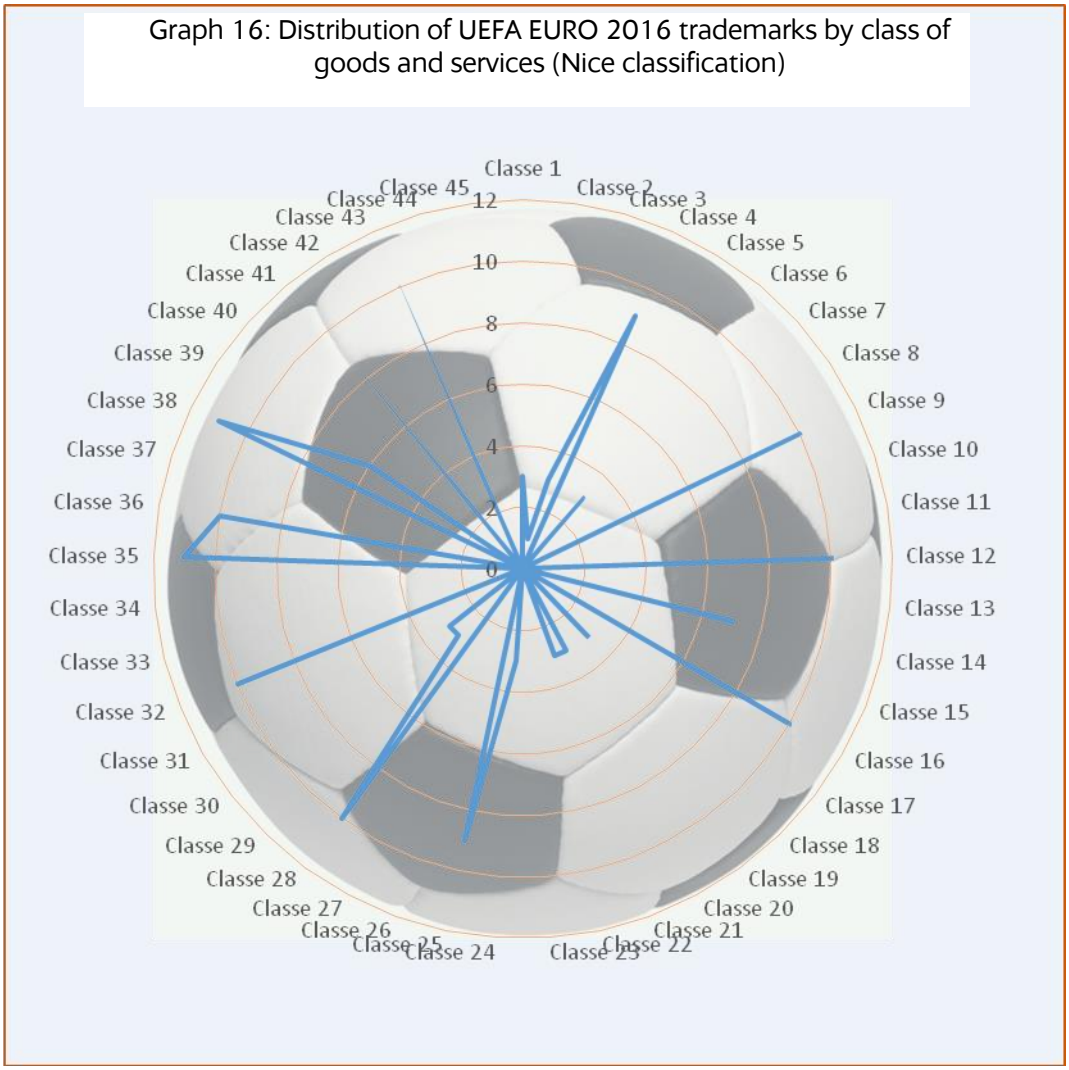


Source: Edital database, INPI processing, 2016

The trademarks owned by the UEFA have been filed for one or more classes of goods and services from the Nice classification. All UEFA Euro 2016 trademarks in force are taken into account. For each trademark identified, whenever a goods or services class number is requested, it is added to the number of applications in this class.

The result indicates relatively homogeneous use of the classes: almost the entire range of classes of goods and services is used by the UEFA, especially the following twelve classes: 3, 9, 12, 16, 25, 28, 32, 35, 36, 38, 41, 43.

Graph 16: Distribution of UEFA EURO 2016 trademarks by class of goods and services (Nice classification)

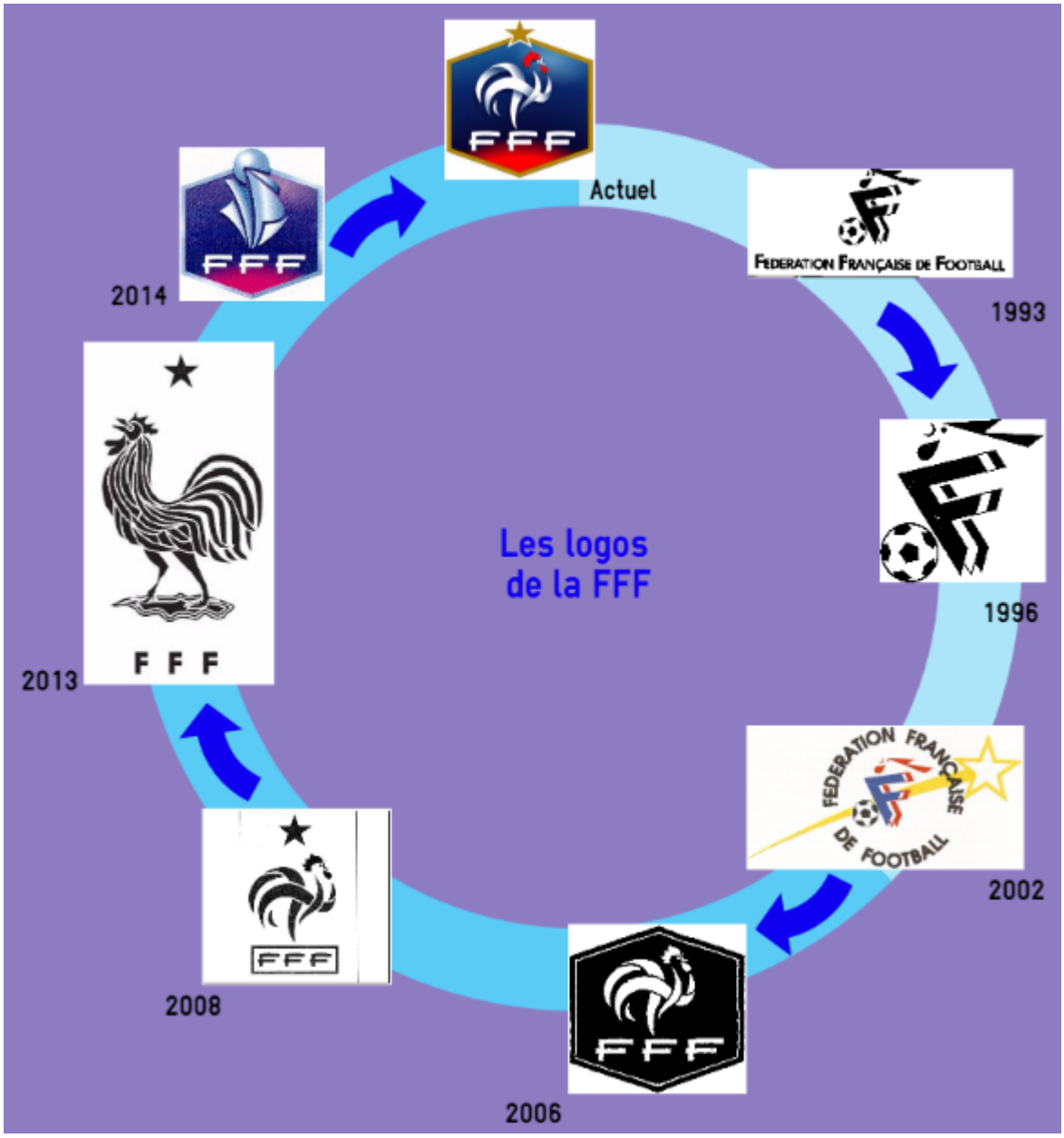


Source: Edital database, INPI processing, 2016

THE FRENCH FOOTBALL FEDERATION AND INDUSTRIAL PROPERTY

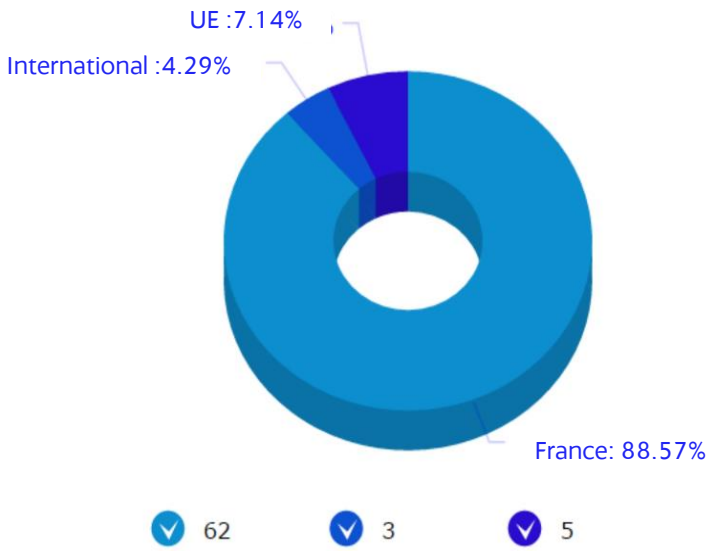
For several years, the French Football Federation and its French national team have used industrial property to protect their symbols and exploit them to best advantage. The symbol opposite is the Federation logo displayed on its web site. Several logos are exploited over a given period, such as on the French national team's shirt: currently, it is a black cock under a star.

Figure 21: Some of the FFF logos, with the years the associated trademarks were filed.



Source: INPI trademarks database, INPI processing, 2016

Graph 19: FFF trademarks – filing routes

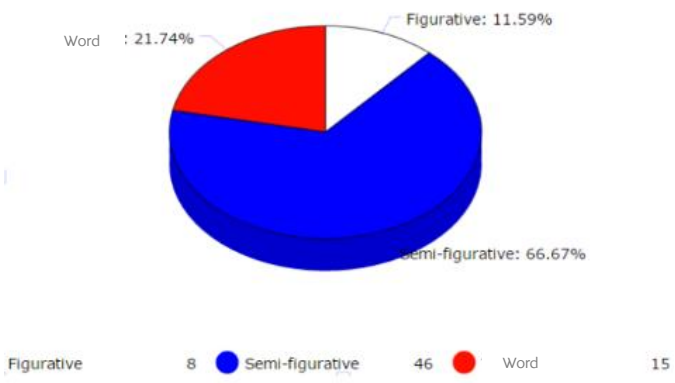


The FFF currently owns 70 trademarks filed mainly in France, with some also filed via the EU or international system. The graph opposite shows the distribution of all FFF trademarks by filing route. Almost 90 % are French applications.

Source: Edital database, INPI processing, June 2016

What types of trademark applications for the FFF?

Graph 20: FFF trademark types



Most of the trademarks filed by the FFF are semi-figurative (over 65 %). A semi-figurative trademark combines a logo and the word trademark or a slogan.

Source: Edital database, INPI processing, June 2016

The various trademarks owned by the French Football Federation have been filed for different classes of goods and services from the Nice classification. The following graph shows the distribution of all FFF trademarks over the various classes of goods and services exploited. For each class number, a counter is incremented by 1 when the number is designated in a trademark application.
Five classes of goods and services in particular have the highest frequencies:

Goods classes:

-16: Printed matter

-25: Clothing, footwear, headgear

-28: Games; playthings

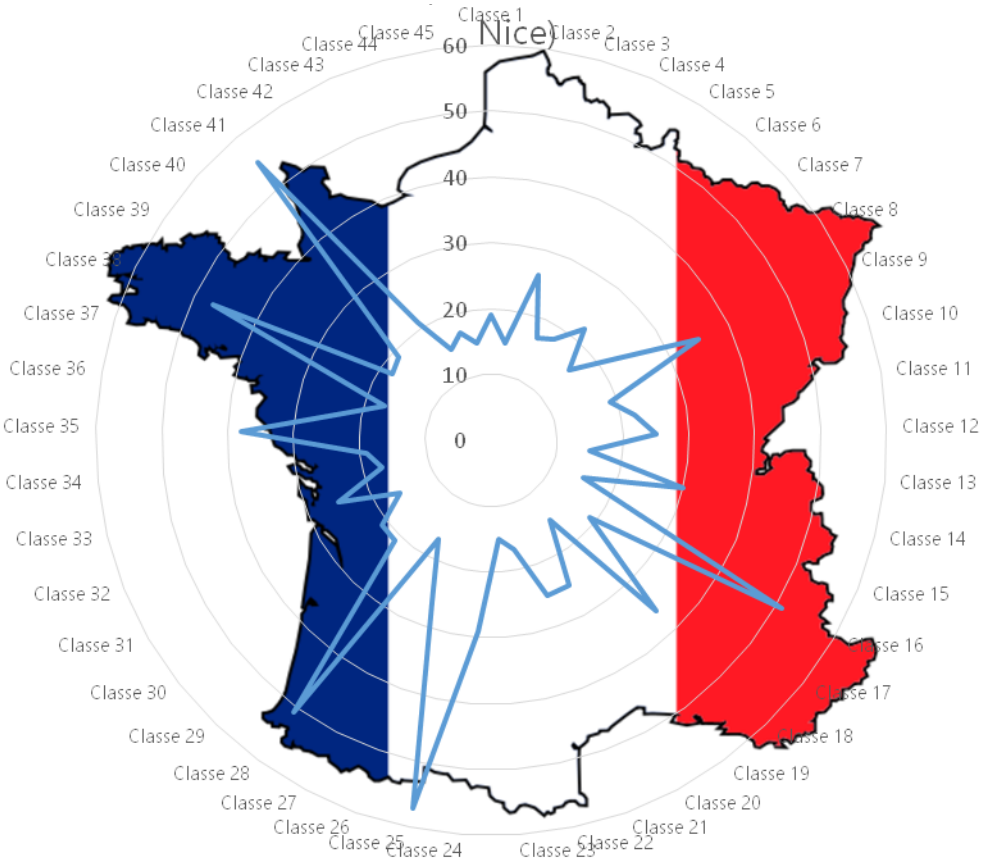
Services classes:

-38: Telecommunications

-41: Education; providing of training; entertainment; sporting and cultural activities

These classes correspond to the directions and requirements of a sports federation.

Graph 21: Distribution of FFF trademarks on the various classes of goods and services (Nice classification)



Source: Edital database, INPI processing, June 2016

France and 23 other nations are taking part in the competition. Each of these federations also owns its own logo(s). All logos owned by the nations taking part in the Euro 2016 with France are shown below.

Figure 22: Logos of the countries who have qualified for Euro 2016

COMPANIES AROUND THE COMPETITION, THEIR VISIBILITY

Football fans look forward to the UEFA European Football Championship, a major international sporting event held every 4 years. It is broadcast throughout the world and is therefore highly coveted. Each match federates millions of TV viewers, in addition to the hundreds of thousands of football fans who support their teams in the stadiums and in the "Fan zones". Over the years, this event has become a fantastic showcase benefiting from huge media coverage. The big companies are fully aware of this phenomenon and use the event to full advantage. They are both sponsors as well as equipment vendors for the teams and the UEFA and, during this period, they benefit from international visibility every day. This event is the opportunity for the big names to be in the limelight and advertise their products. All the partners of the UEFA and the national teams are industrial property experts. They all own a large number of trademarks. The main partners of the UEFA, the French national team and the other major nations of the Euro 2016 are shown below.

The UEFA, competition organiser, has 16 sponsors for the competition organisation:

The logos of these companies are shown on most of the communication media related to the Euro 2016

Figure 21: UEFA partners for the Euro 2016

The partners of the French national team are also highly visible.

They are displayed during training sessions, during the matches, as well as during the press conferences for the players and trainers, etc.

Figure 23: some highly visible logos of the French national team's partners

Source: http://www.lefigaro.fr/sport-business/2014/05/24/20006-20140524ARTFIG00047-les-bleus-inspirent-de-nouveau-confiance-a-ses-sponsors.php

Figure 24: For this Euro 2016 the French national team has no less than 12 major partners

Source: www.fff.fr, INPI database, INPI processing, 2016

The other national teams also have partnerships with big companies.

The official partners of **England,** home of football, managed by the FA (Football Association) belong to 5 major groups:

Figure 25: partners of England

Source: www.thefa.com

We also see that some of them sponsor several teams or the UEFA directly.

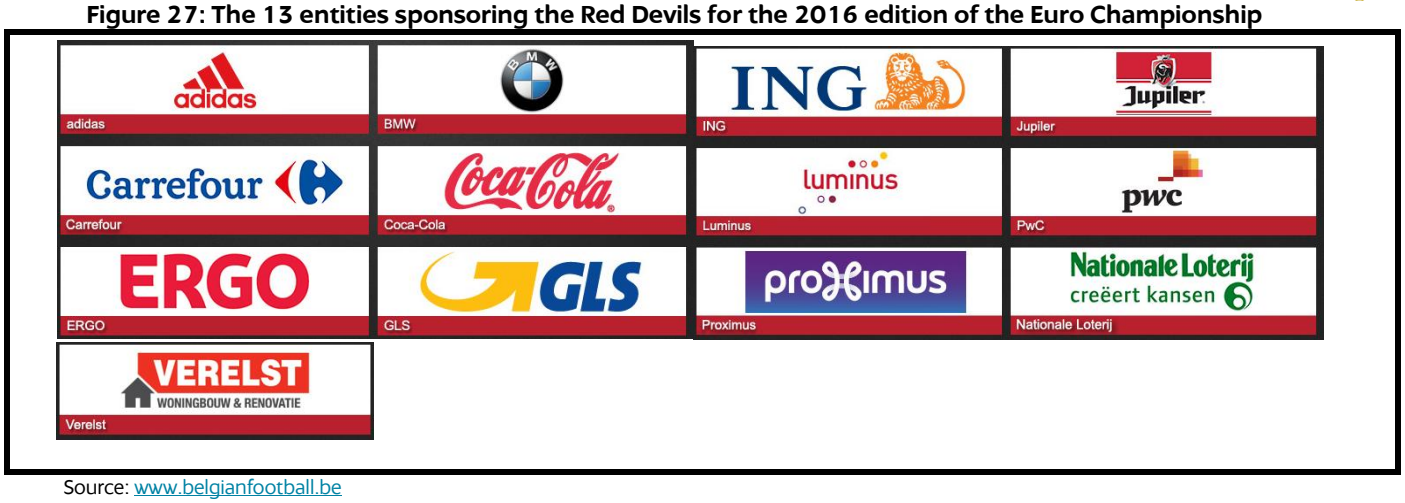
Germany, managed by the DFB (Deutscher Fußball-Bund) which manages its "Nationalmannschaft" also has numerous world-famous sponsors:

Figure 26: partners of Germany

Source: www.dfb.de

Belgium, currently No. 2 in the FIFA world ranking, whose "Red Devils" are managed by the Royal Belgian Football Association, also attracts numerous sponsors

Figure 27: The 13 entities sponsoring the Red Devils for the 2016 edition of the Euro Championship



Source: www.belgianfootball.be

Italy, whose "Squadra Azzura" is managed by the FIGC, also has world-famous sponsors which it classified according to the following themes:

Figure 28: sponsors of Italy

Technical sponsor

Top sponsors

Premium sponsors

"Luxury" partner

Official partners

Source: http://www.figc.it

Like Italy, **Spain**, whose "Roja" is managed by Sefutbol, classifies its sponsors by theme:

Figure 29: sponsors of Spain

Main partners

Official sponsors

Official suppliers

Source: http://www.rfef.es

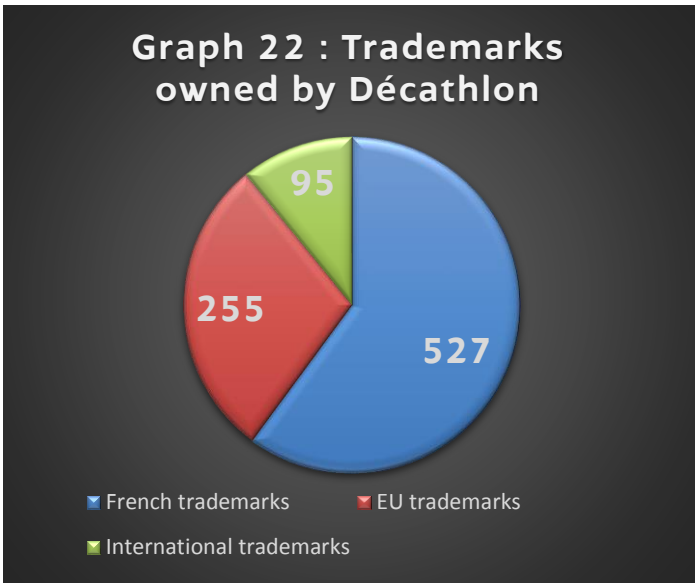
DÉCATHLON, A FRENCH COMPANY INNOVATING IN SPORT

One French company is especially innovating in sport, independently of this Euro 2016.

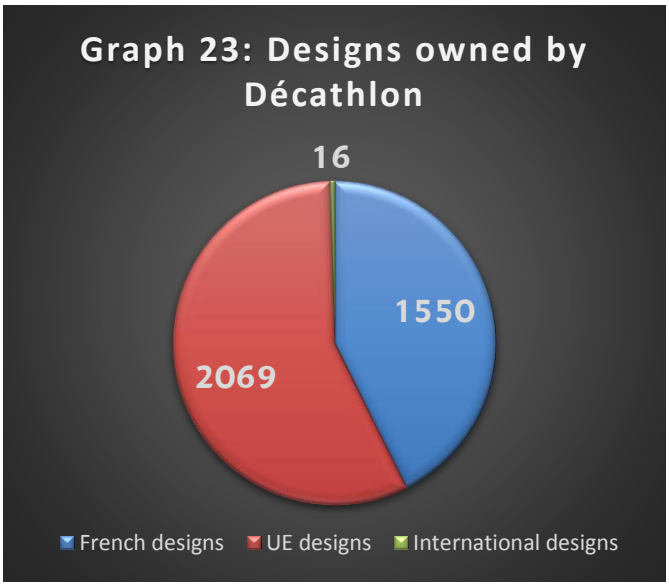
Décathlon is in fact a major French player of innovation in the field of sport. In 2015, Décathlon had a headcount of 70,000 working in 1,053 stores (301 in France) distributed throughout the world. The group uses every aspect of industrial property (trademarks, patents and designs). It therefore breaks down its offering into 20 "passion trademarks" (*marques passions*), each one being associated with its own sports sector (QUECHUA for hiking, KIPSTA for team sports, INESIS for golf, etc.).

Décathlon also sponsors various sports teams. This year, it is partnering the Valenciennes football team, which it will equip during the next League 2 season.

The various industrial property rights are distributed as follows:

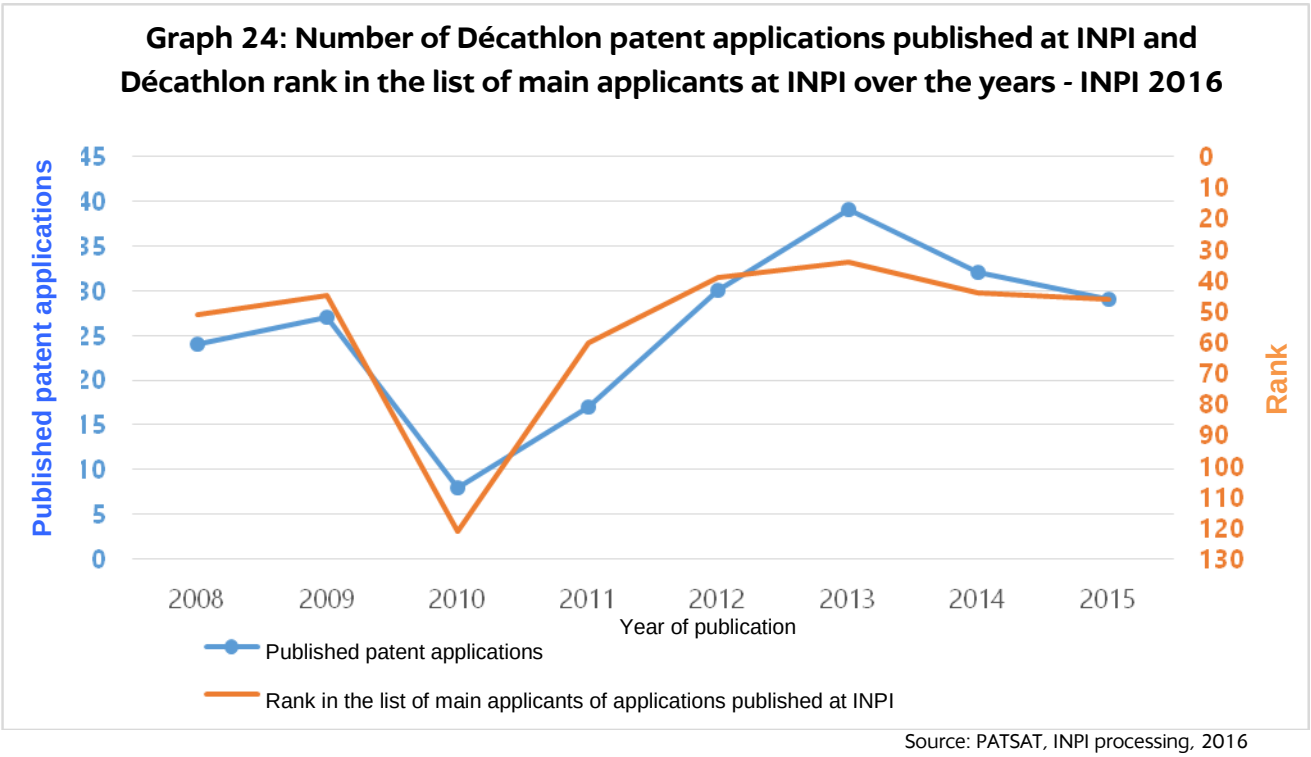


Source: Edital, INPI processing, 2016



Source: Edital, INPI processing, 2016

Décathlon also currently owns 231 French patents and 113 European patents. The patents published over the last few years are distributed as follows:



Source: PATSAT, INPI processing, 2016

In 2015, Décathlon had 29 French patent applications published and ranked 46th amongst the top applicants for French patents.

APPENDICES

APPENDIX 1: DEFINITIONS

International Patent Classification / Classification by technological fields

Since 1975, countries around the world have used the International Patent Classification (IPC), which provides a very fine technological classification, for their patent systems. This very fine hierarchical structure divides technology into eight sections, each one being further subdivided. A symbol composed of Arab numerals and letters of the Latin alphabet is assigned to each hierarchical level. The relevant IPC symbols are shown on each patent document (patent applications published and patents granted), with over one million being issued every year for the last 10 years. The IPC symbols are assigned by the national or regional industrial property office which publishes the patent document. The International Patent Classification is an extremely useful tool to retrieve patent documents when performing a prior art search. This search is required for administrations responsible for granting patents, potential inventors, research-development units, as well as everyone interested in technology applications or development. However, this classification is unsuitable for statistical analysis in terms of technological strategies. The IPC technological classes therefore had to be grouped into 5 technological fields and 35 technological subfields in order to analyse technological policies. The WIPO technology classification used in this study can be accessed on http://www.wipo.int/ipstats/en/statistics/technology_concordance.html.

Patent applicants

Patent applicants may be French or foreign legal entities (companies, universities, research organisations and other public establishments, associations and foundations) as well as French or foreign natural persons.

Specialisation index

The technological specialisation index is defined as the relation between two ratios:
- the number of patent applications published by economic player A in a technological field X compared with the number of applications published by economic player A in all technological fields
- the number of patent applications published by French legal entities in a technological field X compared with the number of applications published by French legal entities in all technological fields.

The more the specialisation index is greater than 1, the more the economic player studied is specialised in the technological field concerned.

Counting principle: presence counting or fractional counting

Presence counting is an integer counting method. As soon as the player (SME, mid-cap) is present in a patent application, it is credited with a unit participation. It is a participation logic.
Fractional counting is part of a contribution logic, where the contributions of each player to each patent application are fractionated to obtain sums equal to 100 % over all the players. The principle is also applied to the distribution of a patent application between several technological fields.

Derwent family

It includes patents covering the same invention. Their relation is defined by the priorities or details of filings claimed by each document: documents with at least one common priority belong to the same family of documents.

Nice classification of goods and services

A trademark is filed in a specific field, for certain goods and/or services. A class is a group of goods or services used, when filing a trademark, to find the field(s) concerned easily.

There are 45 different classes grouping goods and services of the same nature. These 45 classes form the Nice international classification.
For further details: http://www.wipo.int/classifications/nice/en

APPENDIX 2: DATABASES USED

Depending on the aspects of this study, various databases on patents, trademarks and designs have been used. They are presented below.

Patents databases

- **PATSTAT**, autumn 2015 version of the patents database provided by the European Patent Office
- **Derwent World Patents Index** (DWPI) database developed by Thomson Reuters, exploited using the Thomson Innovation tool

Coverage of the Derwent World Patents Index (DWPI) database: it consists of a worldwide patent collection from 50 industrial property offices representing about 65 million patents grouped into families (31 December 2015).

The trademarks and designs databases

- **EDITAL Corsearch**, database containing information on national, EU and international trademarks
- **TMView**, EUIPO trademarks database
- **DesignView**, EUIPO designs database
- **INPI trademarks database**
- **INPI designs database**

APPENDIX 3: QUERIES USED FOR THE MAPS PRESENTED

For the map on Figure 9

Search for patent application publications in the Derwent World Patents Index database by the keywords "football or soccer" present in the title and/or the abstract, excluding publications relating to American or Australian football.

For the map on Figure 12

Search by International Patent Classification (IPC) code A43B05/02: football boots.

For the map on Figure 15

Search for patent application publications in the Derwent World Patents Index database by the keywords "football or soccer" present in the title and/or the abstract crossed with at least one first priority resulting from one of the 54 countries, excluding publications relating to American or Australian football.

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