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## [Game, Set, Match: Intellectual Property and Innovation in Tennis](#)

Breakthrough innovations along with different types of intellectual property (IP) and related IP rights can be found everywhere in the world of tennis, and have been shaping the game from its inception until today: Novel technologies and “smart” materials (typically protected by patents or as trade secrets) have increased the performance of players throughout the years, and keep transforming the nature of the sport. Moreover, new materials applied in sportswear often go hand in hand with new designs blending functionality and fashion. Thus, it comes as little surprise that sportswear enterprises such as LACOSTE (best-known for the famous polo shirt and iconic green alligator logo) have been able to create powerful, trademark-protected brands. Plus, they also learnt how to take

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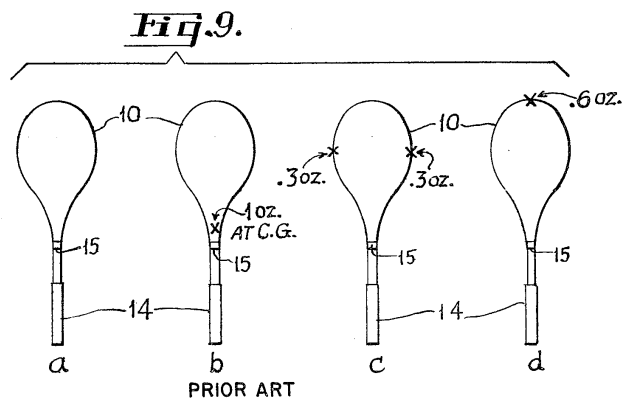
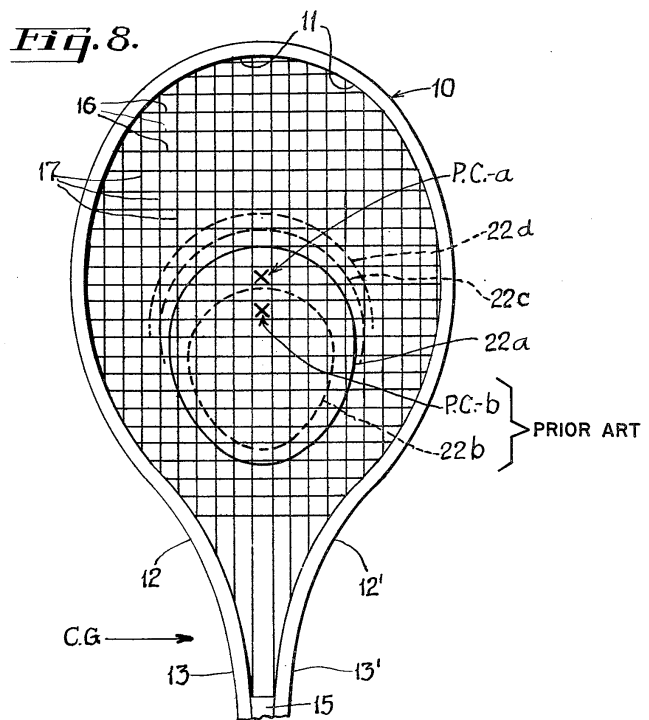
commercial advantage of leading athletes teaming up with tennis court idols to launch personalised fashion lines or sign multi-million sponsorship and merchandising agreements.

With this year's World IP Day exploring how IP rights can help encourage and protect innovation and creativity to support the development of sport, let's take a look at some examples from the famous racket sport.

## **Where the story begins: the first patented tennis court**

The roots of tennis as we know it today are believed to reach back to the 19th century, when Major Walter Clopton Wingfield patented and marketed an hourglass-shaped portable tennis court allowing players to play more comfortably outdoors. Until then, tennis had been mainly played indoors, and it was not always easy for players to obtain all necessary material – be it nets, rackets or balls. Based on successful marketing and his patent, which expired in 1877 as he decided not to enforce it anymore, tennis became known to the population as the lawn outdoor sport that we are used to watch today at Wimbledon, and that has started his triumphal march from England around the world. Major Wingfield also created a set of rules and protected them through copyright. These rules were taken as a basis for the meetings at Marylebone Cricket Club, where the official tennis rules were then promulgated in 1875. Today's rules are only slightly different from the ones invented by Mayor Wingfield and have been serving as the basis for the game for the last 140 years.

## **It's all about the racket: novel rackets give way to new playing techniques**

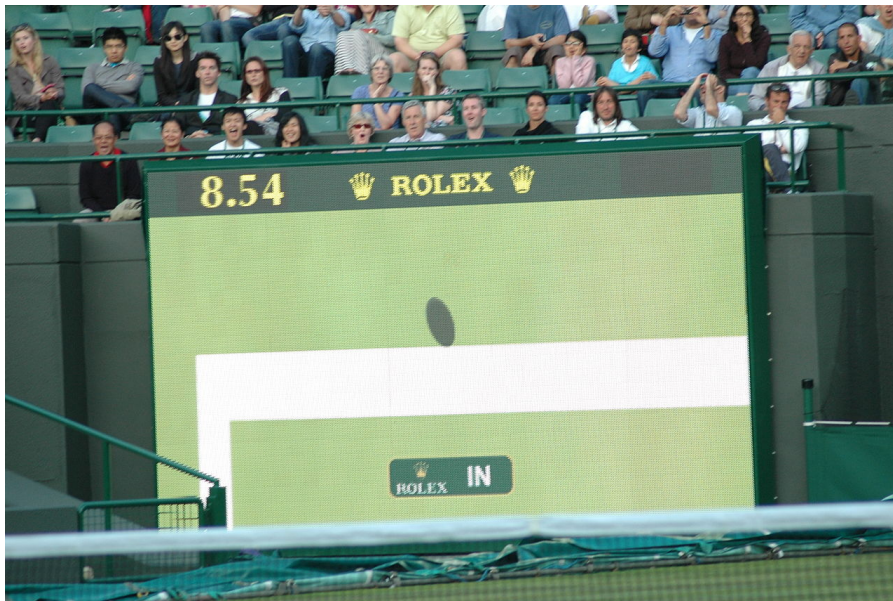


Played with wooden rackets, a tennis ball and a net within a rectangular field, the game did not change much during the first half of the 20th century. In the last 40 years, however, technological inventions have gained significant importance in tennis courts, specifically when looking at the technical equipment. At the beginning of the 1980s, a disruptive innovation came from the American company Prince that produced the first patent-protected oversized racket. Until today, Prince is market leader facing only very few competitors. In general, the tennis (innovation) market is strongly driven by American companies due to the fact that 95% of patents and patent applications in the sector are being held or filed there.

Increasing the surface of the racket from 90 to 110 square inches meant that players got the chance to hit the ball in a more powerful way than before. This improvement, combined with the introduction of innovative materials like graphite and steel to replace the former wooden racket, provided players with hitherto unimaginable new playing options granting them more power and control on their shots. During the 1980s and 1990s, influential players like Boris Becker, André Agassi, Pete Sampras and

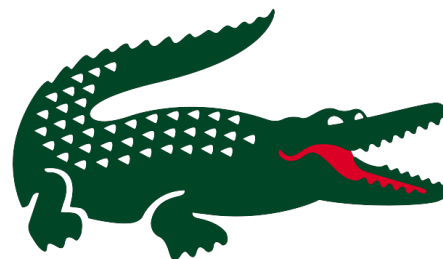
others, exploited these technical advances introducing completely new styles and shots to the game such as the two-handed backhand, inside out forehand, or reverse forehand.

## Tracking the ball: new technologies help make tennis court decisions fairer



At the beginning of the 2000s, another major disruptive technology was adopted in order to optimise referee decisions on the tennis court: The so called Hawk-Eye technology developed by the company Hawk-Eye Innovations (controlled by IBM) and first used in cricket broadcasting made it possible for referees to double-check and potentially amend their decisions. The system tracks the ball's position at a given time using a network of high-speed cameras via triangulation. Multiple cameras are placed around the field able to constantly track the ball position with an error margin of just 3.6 mm. The system is then connected to the referee who can consult it anytime, for instance in case a player requests it. The technology has been improved and further elaborated over the years and has most recently been patented by the company under patent number US8734214B2. Today, it is used for a number of sports including football and basketball giving Hawk-Eye Innovations the chance to license and apply their technology in new and potentially even bigger sports markets.

## Fashion forward: making money with tennis clothing



# LACOSTE

Besides new technical equipment, tennis has always been of major importance for the fashion market – on and off the tennis court. Innovative and aesthetic sportswear such as tennis shirts or shoes

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designed by well-known brands are not only worn by top athletes, but have found their way into everyday life and millions of wardrobes around the world. Therefore, many famous tennis players never hesitated to use their fame and status to sell products associated with their names and skills. Trademarks like Fred Perry (inspired by the great British player) or LACOSTE (founded by the celebrated tennis player René Lacoste) have been available for more than 80 years and are still very profitable to date. Following these examples, today's top players like Roger Federer or Andy Murray have developed and protected their own lines of sportswear through trademarks, and are successfully selling them in collaboration with large sponsors like Nike.

For more, see

[Happy World IP Day 2019 - Watch the animated teaser clip on YouTube!](#)