A RIVAL AND HIGH-DEFINITION TELEVISION pdf

1: Episode 3 | Poldark | PBS

On 11th November , Mr. I. Shoenberg, the Director of Research at Electric and Musical Industries Ltd. (EMI), invited the BBC's Chief Engineer, Mr. N. Ashbridge, to a private demonstration of both the transmission and reception of television.

See Article History Television TV , the electronic delivery of moving images and sound from a source to a receiver. By extending the senses of vision and hearing beyond the limits of physical distance, television has had a considerable influence on society. Conceived in the early 20th century as a possible medium for education and interpersonal communication, it became by mid-century a vibrant broadcast medium, using the model of broadcast radio to bring news and entertainment to people all over the world. Television is now delivered in a variety of ways: The technical standards for modern television, both monochrome black-and-white and colour, were established in the middle of the 20th century. Improvements have been made continuously since that time, and today television technology is in the midst of considerable change. Much attention is being focused on increasing the picture resolution high-definition television and on changing the dimensions of the television receiver to show wide-screen pictures. In addition, the transmission of digitally encoded television signals is being instituted, with the ultimate goal of providing interactive service and possibly broadcasting multiple programs in the channel space now occupied by one program. Despite this continuous technical evolution, modern television is best understood first by learning the history and principles of monochrome television and then by extending that learning to colour. The emphasis of this article, therefore, is on first principles and major developmentsâ€”basic knowledge that is needed to understand and appreciate future technological developments and enhancements. The development of television systems Mechanical systems The dream of seeing distant places is as old as the human imagination. Priests in ancient Greece studied the entrails of birds, trying to see in them what the birds had seen when they flew over the horizon. They believed that their gods, sitting in comfort on Mount Olympus , were gifted with the ability to watch human activity all over the world. For ages it remained a dream, and then television came along, beginning with an accidental discovery. In , while investigating materials for use in the transatlantic cable, English telegraph worker Joseph May realized that a selenium wire was varying in its electrical conductivity. Further investigation showed that the change occurred when a beam of sunlight fell on the wire, which by chance had been placed on a table near the window. Although its importance was not realized at the time, this happenstance provided the basis for changing light into an electric signal. He envisaged a photoelectric cell that would look upon only one portion at a time of the picture to be transmitted. Starting at the upper left corner of the picture, the cell would proceed to the right-hand side and then jump back to the left-hand side, only one line lower. It would continue in this way, transmitting information on how much light was seen at each portion, until the entire picture was scanned, in a manner similar to the eye reading a page of text. A receiver would be synchronized with the transmitter, reconstructing the original image line by line. The concept of scanning, which established the possibility of using only a single wire or channel for transmission of an entire image, became and remains to this day the basis of all television. LeBlanc, however, was never able to construct a working machine. Nor was the man who took television to the next stage: Paul Nipkow , a German engineer who invented the scanning disk. It would be placed so that it blocked reflected light from the subject. The next hole would do the same thing slightly lower, and so on. In Jenkins sent a still picture by radio waves, but the first true television success, the transmission of a live human face, was achieved by Baird in The word television itself had been coined by a Frenchman, Constantin Perskyi, at the Paris Exhibition. Courtesy of Malcolm Baird The efforts of Jenkins and Baird were generally greeted with ridicule or apathy. As far back as an article in the British journal Nature had speculated that television was possible but not worthwhile: A later article in Scientific American thought there might be some uses for television, but entertainment was not one of them. Most people thought the concept was lunacy. Nevertheless, the work went on and began to produce results and competitors. GE used a system designed by Ernst F. That same year Jenkins began to sell television kits by mail and established his own television station, showing cartoon pantomime programs. In Baird convinced the British Broadcasting Corporation BBC to allow him to produce

half-hour shows at midnight three times a week. Not everyone was entranced. Scott, editor of the Manchester Guardian, warned: The word is half Greek and half Latin. No good will come of it. The pictures, formed of only 30 lines repeating approximately 12 times per second, flickered badly on dim receiver screens only a few inches high. Programs were simple, repetitive, and ultimately boring. Nevertheless, even while the boom collapsed a competing development was taking place in the realm of the electron. Electronic systems The final, insurmountable problems with any form of mechanical scanning were the limited number of scans per second, which produced a flickering image, and the relatively large size of each hole in the disk, which resulted in poor resolution. In a Scottish electrical engineer, A. Cathode ray s are beams of electron s generated in a vacuum tube. Because the rays move at nearly the speed of light , they would avoid the flicker problem, and their tiny size would allow excellent resolution. Swinton never built a set for, as he said, the possible financial reward would not be enough to make it worthwhile , but unknown to him such work had already begun in Russia. In Boris Rosing, a lecturer at the St. Petersburg Institute of Technology, put together equipment consisting of a mechanical scanner and a cathode-ray-tube receiver. There is no record of Rosing actually demonstrating a working television, but he had an interested student named Vladimir Kosma Zworykin , who soon emigrated to America. In , while working for the Westinghouse Electric Company in Pittsburgh, Pennsylvania, Zworykin filed a patent application for an all-electronic television system, although he was as yet unable to build and demonstrate it. Meanwhile, the first demonstration of a primitive electronic system had been made in San Francisco in by Philo Taylor Farnsworth , a young man with only a high-school education. With his first hundred thousand dollars of RCA research money, Zworykin developed a workable cathode-ray receiver that he called the Kinescope. At the same time, Farnsworth was perfecting his Image Dissector camera tube shown in the photograph. At that point a healthy cooperation might have arisen between the two pioneers, but competition, spurred by the vision of corporate profits, kept them apart. Iconoscope television camera tubeConceived in by V. The scene to be televised was focused on a light-sensitive mosaic of tiny globules of treated silver, which assumed an electric charge proportional to the strength of the illumination. A narrow scanning beam, shot from an electron gun and traced across the mosaic by magnetic deflection coils, caused a succession of voltages to pass to a signal plate. The picture signal then passed to an amplifier for transmission to a television receiver. In England the Gramophone Company, Ltd. Baird never really recovered; he died several years later, nearly forgotten and destitute. By the conflict between RCA and Farnsworth had moved to the courts, both sides claiming the invention of electronic television. Years later the suit was finally ruled in favour of Farnsworth, and in RCA signed a patent-licensing agreement with Farnsworth Television and Radio, Inc. This was the first time RCA ever agreed to pay royalties to another company. Roosevelt became the first U. Important questions had to be settled regarding basic standards before the introduction of public broadcasting services, and these questions were not everywhere fully resolved until about The United States adopted a picture repetition rate of 30 per second, while in Europe the standard became All the countries of the world came to use one or the other, just as all countries eventually adopted the U. By the early s technology had progressed so far, and television had become so widely established, that the time was ripe to tackle in earnest the problem of creating television images in natural colours. Colour television Colour television was by no means a new idea. In the late 19th century a Russian scientist by the name of A. Polumordvinov devised a system of spinning Nipkow disks and concentric cylinders with slits covered by red, green, and blue filters. But he was far ahead of the technology of the day; even the most basic black-and-white television was decades away. In , Baird gave demonstrations in London of a colour system using a Nipkow disk with three spirals of 30 apertures, one spiral for each primary colour in sequence. The light source at the receiver was composed of two gas-discharge tubes, one of mercury vapour and helium for the green and blue colours and a neon tube for red. The quality, however, was quite poor. In the early 20th century, many inventors designed colour systems that looked sound on paper but that required technology of the future. They proposed to scan the picture with three successive filters coloured red, blue, and green. Unfortunately, this method required too fast a rate of scanning for the crude television systems of the day. Also, existing black-and-white receivers would not be able to reproduce the pictures. In , Harold McCreary designed such a system using cathode-ray tubes. He planned to use a separate cathode-ray camera to scan each

of the three primary-colour components of a picture. He would then transmit the three signals simultaneously and use a separate cathode-ray tube for each colour at the receiving end. The result would be three coloured images, each composed of one primary colour. A series of mirrors would then combine these images into one picture. Although McCreary never made this apparatus actually work, it is important as the first simultaneous patent, as well as the first to use a separate camera tube for each primary colour and glowing colour phosphors on the receiving end. At the same time, Sarnoff whipped his troops at RCA into developing the first all-electronic compatible colour system. However, out of 12 million television sets in existence, only some two dozen could receive the CBS colour signal, and after only a few months the broadcasts were abandoned. The design used dichroic mirrors to separate the blue, red, and green components of the original image and focus each component on its own monochrome camera tube. Each tube created a signal corresponding to the red, green, or blue component of the image. The receiving tube consisted of three electron guns, one for each primary-colour signal. The screen in turn comprised a grid of hundreds of thousands of tiny triangles of discrete phosphors, one for each primary colour. And the RCA colour system was compatible with existing black-and-white sets. It managed this by converting the three colour signals into two: The Y signal corresponded to a regular monochrome signal, so that any black-and-white receiver could pick it up and simply ignore the colour signal. It was not until the s that colour television became profitable. In Europe, two different systems came into prominence over the following decade:

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2: Episode 6 | Poldark | WHYY

Back in the s, HDTV (high-definition television) was an example of this "newer and better stuff"; today, it's quite commonplace. But what makes it different from the TVs that came before? But what makes it different from the TVs that came before?

A good is considered non-rivalrous or non-rival if, for any level of production, the cost of providing it to a marginal additional individual is zero. The same characteristic is sometimes referred to as jointness of supply or subtractable or non-subtractable. A hammer is a durable rival good. However, the first user does not "use up" the hammer, meaning that some rival goods can still be shared through time. An apple is a nondurable rival good: Non-tangible goods can also be rivalrous. Examples include the ownership of radio spectra and domain names. In more general terms, almost all private goods are rivalrous. In contrast, non-rival goods may be consumed by one consumer without preventing simultaneous consumption by others. Most examples of non-rival goods are intangible. The television itself is a rival good, but television broadcasts are non-rival goods. Other examples of non-rival goods include a beautiful scenic view , national defense, clean air, street lights, and public safety. More generally, most intellectual property is non-rival. In fact, certain types of intellectual property become more valuable as more people consume them anti-rival. For example, the more people use a particular language , the more valuable that language becomes. Non-rivalry does not imply that the total production costs are low, but that the marginal production costs are zero. In reality, few goods are completely non-rival as rivalry can emerge at certain levels. For that, recent economic theory views rivalry as a continuum, not as a binary category, [4] where many goods are somewhere between the two extremes of completely rival and completely non-rival. A perfectly non-rival good can be consumed simultaneously by an unlimited number of consumers. Goods that are both non-rival and non-excludable are called public goods. It is generally accepted by mainstream economists that the market mechanism will under-provide public goods, so these goods have to be produced by other means, including government provision. The theory of externalities, public goods, and club goods. Understanding Knowledge as a Commons: From Theory to Practice. A course in public economics.

3: Rivalry | Definition of Rivalry by Merriam-Webster

Yes and no. High definition is the top-level resolution offered within the digital television category. Digital cable comes in three formats - standard, enhanced, and high-definition. Standard has a resolution of i, enhanced is p, and high definition is p and i.

4: Rivalry (economics) - Wikipedia

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5: Television | www.enganchecubano.com

rival meaning: 1. a person, group, etc. competing with others for the same thing or in the same area: 2. to be as good, clever, beautiful, etc. as someone or something else: 3. a person, group, or organization competing with others for the same thing or in the same area.

6: Might James Murdoch Leap To Disney If A Deal Is Done? | Deadline

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7: 8K TVs unveiled by Samsung and LG at Ifa tech show - BBC News

ABS-CBN (an initialism of the network's former names, Alto Broadcasting System - Chronicle Broadcasting Network) is a Filipino commercial broadcast television network that is the flagship property of ABS-CBN Corporation, a company under Lopez Group.

8: ABS-CBN (TV network) - Wikipedia

The year history of high definition television technology is traced from initial studies in Japan, through its development in Europe, and then to the United States, where the first all-digital systems were implemented.

9: Rival | Definition of Rival by Merriam-Webster

Part of the disconnect is the lack of high-definition programming on cable and satellite television, and the additional outlay for decoder boxes and premium channels needed to get it.

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