

Telektroskop Szczepanika
Szczepanik's telectroscope

SUMMARY

Morphological Jan Szczepanik was a creator of over 240 inventions for which he was granted 92 patents in various countries. It is probable that further search in archives and patent offices will make it possible to supplement this list. For financial reasons he could not provide full patent protection for his inventions and studies in the most important industrial countries and that is why many of them were later used for free by recognized world concerns. Szczepanik recently began to regain his due position in the history of Polish technology. In the first place he has become known in the field of weaving, colour photography, colour and sound film, and much less in television and radio engineering.

Meanwhile the telectroscope constructed by Szczepanik guaranteed him an important place among the pioneers of television. The telectroscope was patented by Szczepanik and Ludwik Kleinberg in 1897 in Great Britain and a year later its improved version was patented in the US (search for Szczepanik's patent as "Telegraph without Wire" in the Austrian Patent Office was unsuccessful). The concept of transmission of colour images together with accompanying sound was included in the description of his "apparatus for reproduction of images from a distance by way of electricity".

The article is an attempt to present in detail Szczepanik's invention on the basis of patent applications and existing technical descriptions. Taking into account today's state of knowledge and development of technology, it is to some extent a critical look but not aiming at downgrading Szczepanik's achievements. After analysis of available descriptions, the author comes to a conclusion that either they were (intentionally?) inaccurate or transmission of colour image should not have functioned. The work presents circumstances of the invention's coming into being, the first attempts of its presentation and then undertakes the task of reconstruction of the operation diagram. Patent applications are quoted (in translation) together with illustrative material, and then follows a survey of more important studies and press reports on telectroscope that added new elements to its description from the technical point of view or took up a matter-of-fact discussion about the subject. Presentation of source materials is accompanied by technical analysis of the device and an attempt is made to technically assess the invention against a background of other solutions of this epoch.