

TRIZ Ideas in a Systematic Presentation

P.N. Shimukovich^[0009-0006-5581-1996]

TRIZ Consulting, 124683 Moscow, Russian Federation
pnsh50@mail.ru

Abstract. Genrikh Altshuller started working on the theory of inventive problem solving (TRIZ) almost 70 years ago. The whole subsequent period is a continuous development of TRIZ, both by the founder himself and by his associates, students, and followers.

I developed my own version of TRIZ by combining modern achievements of systems theory and classical TRIZ. At first I called my author's approach the PN-method (P.N. are my initials), then the Recommendations on Systemic Problem Solving. At present I think that the most acceptable variant of the title is "TRIZ Ideas in a Systemic Presentation". The content of my approach is stated in 8 written and published books and many articles.

The following material outlines the structure of the approach and then compares it with classical TRIZ to show the significant differences. The amount of information provided is determined by the allowable size of the article. Particular questions of the approach, its detailing, and analysis of examples of application - all this is in my books. I formulated TRIZ-contradiction in a modified form. My approach allows to concretize the notion of ideality by means of twelve system aspects. TRIZ suggests using the abbreviation MATCEM. I think the transformation of MATHEM into TEI is correct. I offer the model of system "technical result embodiment". The application of my approach to the patenting stage of a new technical solution, as well as its other useful use, is shown.

Keywords: New TRIZ Approach, PN-method, Innovation, Technical Creativity, Invention, Problem-Solving, Inventiveness.