

Artificial Intelligence: A Field of Synthesis of Breakthrough Ideas and Patenting of Intellectual Property

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Abstract

The analysis showed that “artificial intelligence” has become an intensively developing branch of science and technology aimed at the synthesis of breakthrough ideas and patenting of intellectual property. However, the Russian creators of intellectual property in the field of artificial intelligence are not intensively increasing their production and supply to the domestic market and, unfortunately, have a very weak export potential. When creating intellectual property in the field of artificial intelligence, Russian manufacturers do not pay enough attention to their patenting. In the considered branch of science and technology, the development of enterprises and production is necessary for the production of promising new generation intellectual property objects competitive in the markets. Their competitiveness can be enhanced by developing and patenting scientifically sound and fundamentally new intellectual property objects. The paper presents the features and directions of patenting intellectual property in the field of artificial intelligence, gives the most characteristic patents, identifies the main areas of application of methods and technologies of artificial intelligence in various fields of science and technology, gives a classification of patents for inventions and utility models in the context of branches of science and technology, identified organizations, developers of patentable intellectual property. The elements of the knowledge base in the field of artificial intelligence considered in this work can be used for analysis and can be used as analogues and prototypes in the synthesis and patenting of new original intellectual property objects.

Keywords: Artificial Intelligence, Intellectual Property, Patent, Patent Information Search, Results of Intellectual Activity.

1. INTRODUCTION

World trends indicate that in recent years the world market has increased attention to the justification, development and introduction of promising types of intellectual property in the field of artificial intelligence to the markets of various countries. It can be stated that “artificial intelligence” has turned into an intensively developing branch of science and

technology aimed at the synthesis of breakthrough ideas and patenting of intellectual property. Naturally, increased competition in this industry. It is no coincidence that scientists and manufacturers in many countries of the world are actively working in this branch of science and technology. However, the analysis showed that the creation of intellectual property by Russian manufacturers does not pay enough attention to patenting the results of intellectual activity in this area.

Russia, which has significant scientific and production potential, must ensure the development of domestic enterprises and industries for the production of promising new generation intellectual property objects that are competitive in the domestic market and in the markets of foreign countries. The competitiveness of such intellectual property can be enhanced by patenting scientifically sound and fundamentally new intellectual property. This justifies the need for research in the field of studying the features and directions of patenting of new intellectual property in the considered field of science and technology.

The authors formed the goal of research - to study the features and directions of patenting of new intellectual property in the field of artificial intelligence. The need was identified for the collection, synthesis and analysis of information and the formation of a knowledge base on the basis of an advanced patent information search in the artificial intelligence industry for use in the synthesis of breakthrough ideas and patenting of intellectual property in this industry.

2. LITERATURE REVIEW

The work of many Russian and foreign scientists [1; 5; 12; 47; 52; 70; 76] proved the versatility and the vastness of the problem of researching various theoretical and practical aspects of artificial intelligence.

Based on information retrieval and analysis of scientific literature, we consider the main areas of application of artificial intelligence methods and technologies in various fields of science and technology. They are used:

- to solve the problems of operational management and optimizing the functioning of enterprises, production

