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ADDITIVE TECHNOLOGY: PROSPECTS AND CHALLENGES 3D-PRINT (FIRST PART)

Abstract. *Additive technology, or layered synthesis technology, 3D-printing – today is one of the most dynamic areas of the digital production. Conducted economic and legal analysis showed that they allow to accelerate the R & D orders, solving problems of production preparation. Additive technology can increase the profitability of individual units by an average of 23% and reduce barriers for production by 90%. 3D-printing is able to make a revolution in many spheres of life. According to the dynamics of the, additive technology is ahead of other technology industry. At the same time, personal 3D-printing potentially causes problems in the form of large-scale infringements of intellectual property rights by users. Experts estimate the economic damage from the use of intellectual property caused by use of 3D-printing, will amount to 100 billion \$ USA by 2018. The lag of Ukraine from countries leading in this area continues to grow, especially if we take into account the concerted efforts of government, industry and academic institutions, leading countries, aimed at the wide distribution of the additive in the production industry. The introduction of these technologies is impossible without investment in basic and applied research. Experience of other countries shows that this problem can not be solved without significant government involvement and thoughtful financial incentives. The development of the knowledge-based industry is the basis of technological security and independence.*

Keywords: *additive technology, open innovation, inventive activity, 3D-printing, intellectual property, patent landscape.*

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