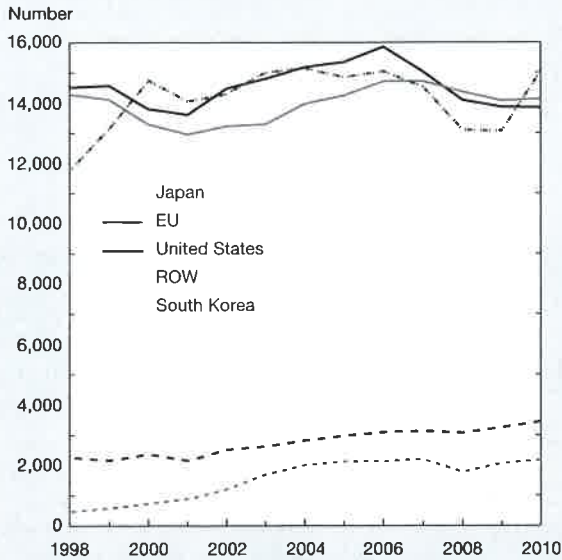


Figure O-16
Global triadic patent families, by selected region/country/economy: 1998–2010



EU = European Union; ROW = rest of world.

NOTES: Triadic patent families include patents applied in the U.S. Patent and Trademark Office, European Patent Office, and Japan Patent Office. Patent families are fractionally allocated among regions/countries/economies based on the proportion of the residences of all named inventors.

SOURCE: Organisation for Economic Co-operation and Development, Patents Statistics, <http://stats.oecd.org/WBOS/index.aspx>, Patents by Region database, accessed 15 January 2011. See appendix table 6-54.

Science and Engineering Indicators 2014

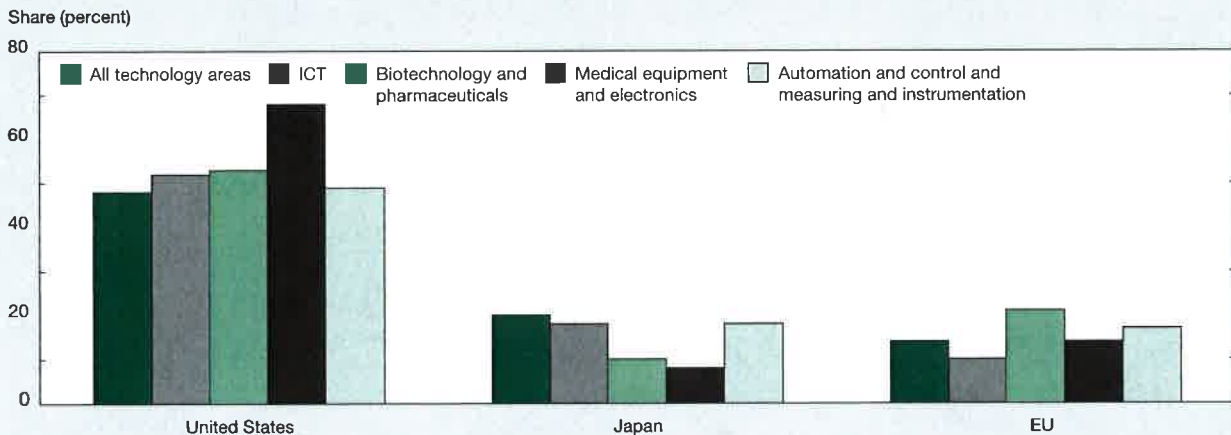
than average share is automation and control and measuring and instrumentation (17%).

KTI industries account for a large share of USPTO patent grants awarded to inventors in the United States. In 2011, HT manufacturers garnered 29,000 of the 58,000 patents granted to all U.S. manufacturing industries. U.S. commercial KI services industries accounted for 46% of the 43,000 patents issued to nonmanufacturing industries in 2011. Although HT manufacturing is a smaller part of the U.S. economy than KI services, the majority of inventions attributable to KTI industries occur on the manufacturing side.

In manufacturing, five of the six HT manufacturing industries—aircraft and spacecraft; communications; computers; pharmaceuticals; and testing, measuring, and control instruments—reported rates of product and process innovation that were at least double the manufacturing sector average. In KI services industries, software firms lead in incidence of innovation, with 69% of companies reporting the introduction of a new product or service, compared to the 9% average for all nonmanufacturing industries. Other KI services industries—such as computer systems design, data processing and hosting, and scientific R&D services—also report innovation at rates that are three to four times higher than the nonmanufacturing average.

Innovative activities and trade in intellectual property are strongly related. Intellectual property trade is measured by royalties and fees collected for licensing or franchising proprietary technologies. Although sometimes affected by different tax treatments, income from intellectual property broadly indicates which nations are producing intellectual products with commercial value. U.S. export income from royalties and fees has exhibited a strongly positive trend

Figure O-17
USPTO patents granted, by selected technology areas for selected country/economy of inventor: 2010–12



EU = European Union; ICT = information and communications technologies; USPTO = U.S. Patent and Trademark Office.

NOTES: Technologies are classified by The Patent Board.™ Patents are fractionally allocated among countries on the basis of the proportion of the residences of all named inventors.

SOURCE: The Patent Board,™ special tabulations (2013) from Proprietary Patent database. See appendix tables 6-40 and 6-43–6-53.

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