

Global Invention Map

INVENTION IS exploding globally, but only in certain hot spots. Nearly half of U.S. patents are now awarded to foreign companies and inventors. As measured by patents per million people, some two dozen countries (in purple, blue, and green) now have significant levels of invention and innovation, activity that correlates highly with standards of living. The numerical rankings reflect “national innovation capacity.” Defined as “the degree to which a nation offers a favorable environment at the world technology frontier,” this measure also takes into account the strength of regional clusters of innovative companies and universities. There are some surprises, with small countries ranking near the top—like Finland, at number two—and vast regions of the world still hardly registering. The wild cards, of course, are India and China, which would remake the map if their already significant levels of innovation grew to be more commensurate with their vast populations.

ILLUSTRATION BY GREG MABLY





COLOR KEY

2003 U.S. patents per million people

- More than 125
- 75 to 125
- 40 to 75
- 5 to 40
- 1 to 5
- Less than 1
- No data

NUMERICAL KEY

National innovative capacity measures a country's potential to produce commercially relevant innovations. The rankings are derived from the following metrics: U.S. patents per million people; proportion of scientists and engineers; innovation policy; number and size of technology hot spots; degree of connection between those hot spots and other institutions; GDP per capita; business competitiveness; sophistication of marketing; and correspondence between pay and productivity. NR means no rank on the 2003 list.

SOURCE: MICHAEL PORTER OF HARVARD BUSINESS SCHOOL AND SCOTT STERN OF NORTHWESTERN UNIVERSITY AND THE NATIONAL BUREAU OF ECONOMIC RESEARCH

SOURCES: CHI RESEARCH, U.S. PATENT AND TRADEMARK OFFICE, CIA WORLD FACTBOOK 2003