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Japan Should Counter China's Application for Shinkansen Patents

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On June 30, China opened a 1,318-kilometer bullet train system between Beijing and Shanghai. The opening was reportedly moved up one year earlier and was timed to precede the 90th anniversary of the Chinese Communist Party on the next day.

Plagiarism of bullet train system

Japan has developed and improved bullet train systems on its own. This fact is well known throughout the world and has prompted France and Germany to develop their respective bullet train technologies.

China has imported bullet train cars from Japan's Kawasaki Heavy Industries Ltd. and Germany's Siemens AG. For building the Beijing-Shanghai railway, China has reportedly used technologies for "Hayate" bullet trains adopted for the Tohoku Shinkansen high-speed system in northern Japan. As China has been criticized for stealing technologies imported from abroad, Central Japan Railway Co. has refrained from exporting its bullet train system to China.

It is well known that China is attempting to export cars, manufactured with Japan's bullet train technologies, to other countries including the United States. Japan is also willing to export its bullet train systems to these countries. Japan's past bullet train exports to China could thus allow China to take the market from Japan.

Impudent claim of "homegrown technology"

China goes even further. Following the opening of the Beijing-Shanghai bullet train system, China is reportedly taking procedures to apply for patents for the system in Europe, the United Stats and Russia, claiming the system features a higher speed than the Japanese system and represents Chinese homegrown technologies. China's impudence is amazing. We must remember that China's bare-knuckle efforts to boost national prestige and pursue national interests are not limited to territorial and military issues. We must question in the first place why Kawasaki Heavy Industries has failed to apply for patents for its bullet train systems.

Patents are issued for inventions if certain conditions are met. Among them,

novelty and progressivity are important. Japan's basic bullet train technologies are decades old and now lack novelty, failing to be patentable. Even novel inventions may fail to be patentable in the absence of progressivity if they can be made easily by people with relevant conventional knowledge. This means that uniqueness is required for patentable inventions.

Patents take two to three years to be issued after applications. Once patents are issued, products infringing them may be prohibited from being sold and subjected to damages claims.

Although there are doubts about if technologies subject to China's patent application meet patent conditions, Japan must make all-out efforts to counter China that takes advantage of every means including political pressures to push the envelope in its own direction.

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