

Tapping into EPA Innovations

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EPA employs some of the most innovative scientists in the world. The federal government takes an interest in marketing the inventions that these world-class scientists develop while employed by the federal government.

The law

A 1986 amendment to the Federal Technology Transfer Act (FTTA) directed federal government agencies to allow inventors to patent inventions if agencies elected not to do so. The law is intended to reward innovation and allow new ideas from government laboratories to enter the marketplace.

Under the FTTA, EPA scientists and researchers are allowed to patent their inventions and receive royalties from them when the inventions are licensed to others. Under a patent license agreement, technology developed in an EPA lab or technology center can lawfully be transferred to a third-party for further development and/or commercialization in exchange for a portion of the proceeds generated by the invention. Another feature of the 1986 amendment was its authorization of Cooperative Research and Development Agreements (CRADA) between federal laboratories and non-federal entities.

West Virginia High Technology Consortium Foundation

Under TechMatch, EPA's Office of Science Policy assists EPA scientists in evaluating the marketability of employee inventions pursuant to a corporate agreement with the West Virginia High Technology Consortium Foundation (WVHTCF). Based in Wheeling, W.Va., the WVHTCF is a 501(c)(3) non-profit organization. Its primary function is to assist EPA and other federal agencies in commercializing their technology by partnering the agencies with private sector companies for technology licensing, transfer, and research and development.

TechMatch website



EPA's TechMatch is a new patent website developed with the cooperation of the WVHTCF, available at www.epatechmatch.com. The public has access to view and search EPA patents to facilitate partnership opportunities between non-federal entities and EPA laboratories. According to EPA's Dr. George Gray, assistant administrator for the Office of Research and Development, "TechMatch will encourage entrepreneurs to license technologies developed by EPA scientists for new products that both strengthen environmental protection and improve the growth of our economy."

A key advantage of the website for the private sector is the inclusion of third-party independent analyses, performed by the WVHTCF, of the commercial potential of the technology. Presently, users can search more than 130 EPA patents. Recently awarded patents featured on the site include:

- Low-emission diesel combustion system with low charge-air oxygen concentration levels and high fuel injection pressures. The result is an engine that meets

environmental standards for NOX and particulate matter emissions without the need for expensive after-treatment devices, while still maintaining diesel-like fuel efficiency.

- Exhaust after-treatment system and method for an internal combustion engine that is optimized for the capturing of NOX under the oxidizing conditions characteristic of diesel and lean-burn engine exhaust streams. The system delivers it to a three-way catalyst under reducing conditions necessary for efficient reduction of the NOX, to N₂.

Conclusion

Commercializing new technology that will help improve environmental protection is a good idea. TechMatch offers a useful, user friendly and informative online information center that helps showcase inventions made possible, in part, by taxpayer dollars. Thanks to the FTTA, federal employee inventors are able to participate in the value created by their inventions, and help achieve environmental protection at the same time.

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