



Technology Available for License

System for the non-destructive removal of radioactive material from challenging porous surfaces

Researchers at Montana State University and Idaho National Lab have developed a process to effectively and efficiently clean natural and man-made porous material of radioactive contamination. The system eliminates the practice of full demolition and removal of contaminated objects and can address radiation on surfaces such as brick, tile, cement, granite, marble and other stone material.

The novel aspect of this work is the development of an alternative to destruction and disposal of the porous contaminated substrate. Thus, building walls (interior or exterior), floors and ceilings can be remediated without destroying the structure. Likewise, works of sculpture, countertops, lab benches and other valuable objects can be decontaminated. On a larger scale this process can also address contamination on bridges, roads and sidewalks thus saving tremendous costs in demolition, removal and replacement.

The process combines an inexpensive laser and a polymer material to irradiate, free and capture contaminants from porous surfaces. The captured material may then be cured and removed from the decontaminated site.

Benefits of this process:

- Non-destructive allowing restoration of valuable and precious objects
- Captures contaminants for easy separation and disposal
- Ease of use
- Inexpensive

Technology Transfer and Development Status:

US patents 7723463, 7833357, and 8070881 have been issued, covering this technology.

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