RECRYSTALLIZED LASER DEPOSITED MATERIALS

This technology is a direct metal deposit with friction a friction stir process that results in a finished aggregated piece with comparable full structural quality to a wholly forged piece. This means that a broken part may be repaired with excellent bonding and strength or a piece may be constructed using rapid prototyping to result in a fully formed piece with completely bonded layers. The inventors showed a Ti-6Al-4V direct metal deposition layer could be formed with forged like characteristics.

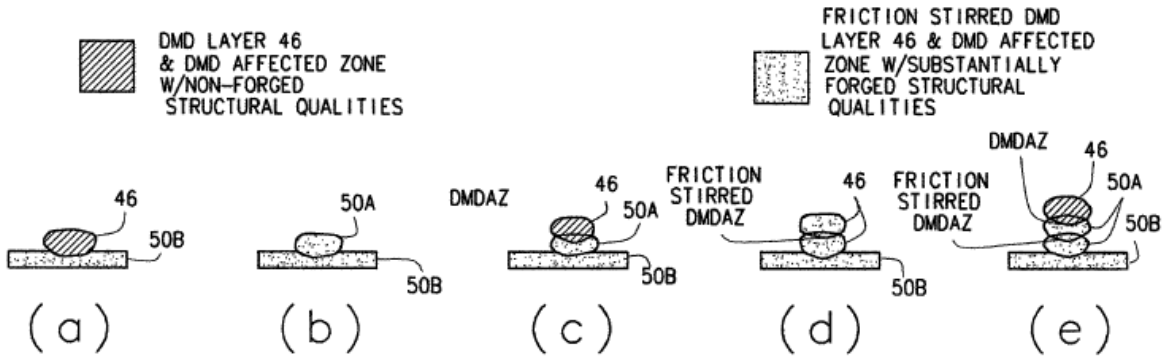

FIG. 5

POTENTIAL AREAS OF APPLICATIONS:

- Metal part repair
- Metal part fabrication
- Metal part design

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INVENTOR(S): Joseph Newkirk; Frank Liou; Romy Francis

CONTACT INFO: Keith Strassner; kdstrass@mst.edu; 573-341-6725

Eric Anderson; ericwa@mst.edu; 573-341-4551; Vera Anderson; vera@mst.edu; 573-341-7263