

## Permanent Multifunctional Patterning of Glass Surfaces Using Infrared Heating

### **Disclosure Number**

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### **Technology Summary**

The invention enables multifunctionality to be permanently incorporated onto the surface of glass or glass ceramics or even ceramics. This is accomplished through the combination of patterned deposition of multifunctional inks or pastes onto glass or glass ceramic or ceramic materials and then heating. The multifunctionality could be in the form of electrically-conductive, magnetic, thermoelectric, residual-stress-causing, crack-pattern-altering, structure-stiffening, light-diffraction-causing, and piezoelectric patterned coatings or created topographies permanently well-bonded onto the surface of glass. The heating processes the ink or paste into its final form without degrading the (substrate) glass.

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