[구SF-01] IRAS 15099-5856:

Remarkable Mid-Infrared Source with Prominent Crystalline Silicate Emission

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We report the discovery of a bright mid-infrared (MIR) source with prominent crystalline silicate emission using the space telescope AKARI and *Spitzer*. This source, IRAS 15099–5856, has a spectacular morphology with a bright central compact source (CCS) surrounded by knots, spurs, and several extended (~4') arc-like filaments. The source is seen only in infrared at $\geq 10~\mu m$. The *Spitzer* MIR spectrum of the CCS shows prominent emission features from Mg-rich crystalline silicates and strong [Ne II] 12.88 μ m and several other faint ionic lines. We model the MIR spectrum as thermal emission from several independent dust components and compare their properties to those of the Herbig Be star HD 100546 which shows very similar MIR spectrum. Our molecular line observations reveal two molecular clouds around the source, but no associated dense molecular cores. We discuss two possible origins for IRAS 15099–5856; a deeply embedded massive young stellar object on the other side of the Galaxy and a disrupted, protoplanetary disk being photoevaporated by the UV radiation from the nearby O star Muzzio 10.