

Inventor Performance Pressure and Strategic Innovation Management*

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Abstract

We investigate whether corporate inventors, under pressure from annual performance appraisals, engage in opportunistic *innovation management* by filing an excessive number of low-quality patents during the fiscal year-end (FYE) month. Consistent with this behavior, we find that US public firms file 43% more patents in FYE months compared to other months. This pattern persists over time, across various firm sizes, industries, and technologies, and extends internationally. Patents associated with such innovation management exhibit significantly lower quality compared to their counterparts. Furthermore, innovation management is more pronounced among inventors who are trailing in patent filings earlier in the year, have less experience, or possess poor track records. Innovation management by inventors is associated with reduced inventor turnover in the initial years but increased turnover in subsequent years, highlighting a tradeoff between short-term gains from enhanced performance and long-term harm from lower patent quality and reputational damage. Finally, innovation management leads to lower future firm performance and stock returns. Our findings suggest that opportunistic innovation management contributes to the excessive filing of low-quality patents, a significant issue in the innovation system.

Keywords: Innovation management, inventor opportunistic behavior, patent filing, fiscal year-end, patent quality, annual performance appraisals.

JEL Classification: O31, J24, M52