



## 基于专利文本数据的技术实力评价方法

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**摘要** 【目的】提出不依靠专利引文数据、利用专利文本数据评价企业技术实力的方法。【方法】该方法综合采用专利授权数量指标、专利增长率指标、技术中心性指标和专利最小价值指标来评估技术实力。这4类指标分别从技术规模、技术增长性、技术重要性和技术价值性等不同侧面反映一个企业的技术能力。【结果】通过CII和TII指标对比实验,验证引文分析给公开早的专利较高评价的问题;通过TS指标和TS<sub>QGIIV</sub>对比实验,验证提出的技术实力评价方法的有效性。【局限】数据处理中没有对机构名称进行规范化处理,实验结果可能存在误差。【结论】相比于其他评价技术实力的方法,本研究可以在没有引文数据的情况下对企业的技术实力进行评价。

关键词: [技术实力评价](#) [专利分析](#) [专利评价](#) [评价指标](#)

**Abstract:** [Objective] The paper aims to propose a method to evaluate enterprise technical strength based on patent text data without citation data. [Methods] Four indexes are used to evaluate technical strength comprehensively, including valid granted patent quantity index, patent growth ratio index, technical centrality index and patent minimum value index. The four indexes reflect technical strength respectively from technical scale, growth, importance and value. [Results] The experimental results on indexes comparison between CII and TII show that citation analysis give higher value to earlier published patents. Another experimental results on indexes comparison between TS and TS<sub>QGIIV</sub> show the effectiveness of the proposed method. [Limitations] The enterprise names are not normalized in data pre-process, which might cause errors to experimental results. [Conclusions] Compared with previous methods, the proposed novel method can evaluate technical strength of companies without citation data.

**Keywords:** [Technical strength evaluation](#), [Patent analysis](#), [Patent evaluation](#), [Evaluation index](#)

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作者贡献: 韩红旗: 提出研究思路, 设计研究方案, 负责论文起草和最终版本修订; 桂婕: 燃料电池中国专利数据的采集、清洗和格式加工; 刘玉琴: 触摸屏技术的美国授权专利数据的采集、清洗和格式加工; 徐硕, 桂婕, 刘玉琴: 进行实验。

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