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(57) Abstract :
The present invention relates to a system (100) and method (200) for managing construction claims efficiently within a Building Information Modeling (BIM) environment. Traditional claim processes are often fragmented, manual, and prone to delays. This invention offers an integrated solution that automates claim identification, documentation, validation, and resolution. The system (100) includes an analysis module (101) to detect project issues and identify impacted BIM elements, which are linked to structured digital claim forms. A visualization and reporting module (103) generates 3D views and automated reports to clearly present claim details. A contract clause validation module (104) checks claim data against relevant clauses, maintaining traceable records. A resolution module (105) supports real-time collaboration among stakeholders to review, decide, and update claim statuses within the BIM model. By unifying these processes, the system (100) enhances transparency, reduces errors, and speeds up claim resolution in construction projects. (to be published with figure 1)

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