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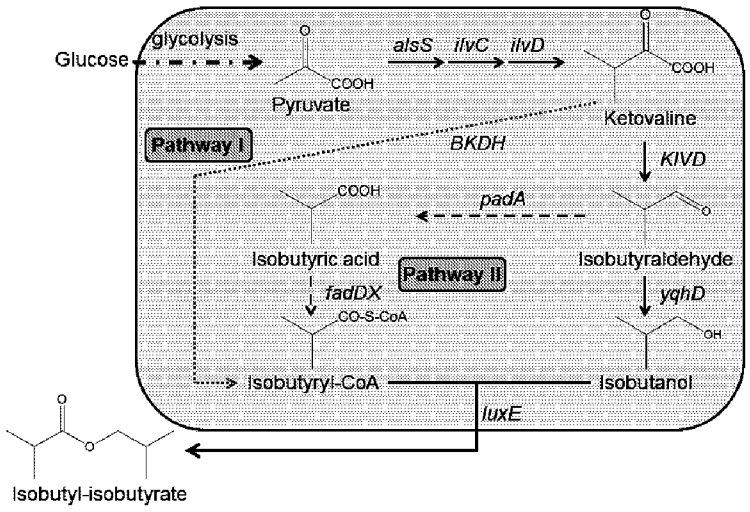
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(54) **Title**: BIOSYNTHETIC PATHWAYS, RECOMBINANT CELLS, AND METHODS

Figure 2



(57) **Abstract**: This disclosure describes engineered biosynthetic pathways, recombinant cells, and methods relating to biosynthesis of esters. The recombinant cells may be modified to exhibit increased biosynthesis of an ester compared to a wild-type control. The recombinant cell may be incubated in medium that includes a carbon source under conditions effective for the recombinant cell to produce an ester. This disclosure also describes a method that generally includes introducing into a host cell a heterologous polynucleotide encoding at least one polypeptide that catalyzes a step in converting a carbon source to an ester, wherein the at least one polynucleotide is operably linked to a promoter so that the modified host cell catalyzes conversion of the carbon source to an ester.

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