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(54) **Title**: RECOMBINANT HALOHYDRIN DEHALOGENASE POLYPEPTIDES

(57) **Abstract**: The present disclosure provides engineered halohydrin dehalogenase (HHDH) polypeptides having improved enzyme properties as compared to the wild-type HHDH enzyme HheC and other reference engineered HHDH polypeptides. Also provided are polynucleotides encoding the engineered HHDH enzymes, host cells capable of expressing the engineered HHDH enzymes, and methods of using the engineered HHDH enzymes to synthesize a variety of chiral compounds including chiral epoxides and chiral alcohols.