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(54) Title: ATTENUATED HYBRID CATALYSTS

(57) Abstract: A method of making an attenuated-light-off hybrid catalyst, the method comprising combining a faster-light-off catalyst with an effective amount of a kinetics modifier compound of formula (A¹), (B¹), or (C¹): R⁵-C≡C-R⁶ (A¹), (R⁵)₂C=C=C(R⁶)₂ (B¹), or (R⁵)(R⁷)C=C(R⁶)(R⁷) (C¹) as defined herein under effective reaction conditions to give an attenuated hybrid catalyst that exhibits an attenuated light-off kinetics profile (relative to that of the faster-light-off catalyst); wherein the faster-light-off catalyst has been made by activating a hybrid precatalyst (i.e., an unactivated "coordination entity" or "ligand-metal complex") of structural formula (I): (Cp)₂(L)_k(X)_x (I) as defined herein; and related methods, compositions and uses.



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