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(54) Title: ADZYMES AND USES THEREOF

(57) Abstract: Disclosed is a family of novel protein constructs, useful as drugs and for other purposes, termed "adzymes," comprising an address moiety and a catalytic domain. In some types of disclosed adzymes, the address binds with a binding site on or in functional proximity to a targeted biomolecule, *e.g.*, an extracellular targeted biomolecule, and is disposed adjacent the catalytic domain so that its affinity serves to confer anew specificity to the catalytic domain by increasing the effective local concentration of the target in the vicinity of the catalytic domain. The present invention also provides pharmaceutical compositions comprising these adzymes, methods of making adzymes, DNA's encoding adzymes or parts thereof, and methods of using adzymes, such as for treating human subjects suffering from a disease, such as a disease associated with a soluble or membrane bound molecule, *e.g.*, an allergic or inflammatory disease.