

U.S. Patent No. 8,798,120	
Element 25[pre]: A mobile station for use in a communications system comprising:	Element 29[pre]: A mobile station for use in a communications system comprising:
Element 25[a]: a first antenna and a second antenna;	Element 29[a]: a first antenna and a second antenna;
Element 25[b]: first circuitry coupled to the first antenna and configured to process signals for transmission by the first antenna; second circuitry coupled to the second antenna and configured to process signals for transmission by the second antenna; and	Element 29[b]: first circuitry coupled to the first antenna and configured to process signals for transmission by the first antenna; second circuitry coupled to the second antenna and configured to process signals for transmission by the second antenna; and
Element 25[c]: a controller coupled to the first and second circuitry, wherein the controller is configured to receive a control signal and,	Element 29[c]: a controller coupled to the first and second circuitry, wherein the controller is configured to receive a control signal and,
Element 25[d]: in accordance with the control signal, to select between a multiple-input multiple-output (MIMO) mode wherein both the first and second antennas transmit data over a communications channel and a single-input multiple-output (SIMO) mode wherein only one of the first and second antennas transmit data over a communications channel,	Element 29[d]: in accordance with the control signal, to select between a multiple-input multiple-output (MIMO) mode wherein both the first and second antennas transmit data over a communications channel and a single-input multiple-output (SIMO) mode wherein only one of the first and second antennas transmit data over a communications channel,
Element 25[e]: wherein the control signal is based, at least in part, on a power consumption of the first and second circuitry,	Element 29[e]: wherein the control signal is based, at least in part, on a power consumption of the first and second circuitry,
Element 25[f]: wherein the control signal is based, at least in part, on an idle power consumption of the mobile station.	
	Element 29[f]: wherein the control signal is based, at least in part, on a number of users of the communications system.

26: The mobile station of claim 25, wherein the control signal is based, at least in part, on a correlation in the communications channel.	
27: The mobile station of claim 25, wherein the control signal is based, at least in part, on energy optimized rates for the MIMO mode and the SIMO mode.	
28: The mobile station of claim 25, wherein the control signal is transmitted to the mobile station by a base station.	