

U.S. Patent No. 8,315,203			
1[pre]. A method for developing a map for use by a user, the user being selectively individuals, vehicles, and other entities, comprising:			
	6[pre]. A method of communicating data between at least one selected communication transponder and at least one selected mobile communication device comprising:	29[pre]. A method of communicating data between at least one selected communication transponder and at least one selected mobile communication device comprising:	30[pre]. A method of communicating data between at least one selected communication transponder and at least one selected mobile communication device comprising:
1[a]. using a geographical zone, the zone selectively being a preconfigured geographical zone,	6[a]. using a geographical zone, wherein the zone includes a plurality of spaced apart communication transponders; the transponders including a transmitter and receiver and wherein at least one of the transponders permits communication with a mobile device of a user;	29[a]. using a geographical zone, wherein the zone includes a plurality of spaced apart communication transponders; the transponders including a transmitter and receiver and wherein at least one of the transponders permits communication with a mobile device of a user;	30[a]. using a preconfigured geographical zone, wherein the zone includes a plurality of spaced apart communication transponders; the transponders including a transmitter and receiver and wherein at least one of the transponders permits communication with a mobile device of a user;
1[b]. the zone including a plurality of spaced apart nodes, wherein the nodes are arranged in a multi-dimensional sense, the location of the plurality of nodes in the multidimensional			

sense being placed with a structure attached to the ground;			
1[c]. sending data communications between one or more of the nodes, one or more users, and one or more control stations; and	6[b]. sending data communication between pluralities of the transponders in a network communication protocol with each other, applying the plurality of transponders in the network with each other to define the zone,	29[b]. sending data communication between pluralities of the transponders in a network communication protocol with each other, applying the plurality of transponders in the network with each other to define the zone,	30[b]. sending data communication between pluralities of the transponders in a network communication protocol with each other, applying the plurality of transponders in the network with each other to define the zone,
1[d]. affecting multi-dimensional mapping according to the placement of the nodes and the communications between the nodes and the control stations, wherein the mapping is affected in a three-dimensional sense, selectively being a three-dimensional sense in the x, y, and z axes or coordinates and the structure is a building, the building having different elevational levels and there are nodes on different elevational levels whereby there are nodes at multiple different elevational levels, and wherein the system narrows the plurality of nodes for use by the user at			

a first elevational level to the most practically near node to the user, such that a node at another elevational level, even though physically closer to the user at the first elevational level is excluded as being a node the most practically near to that user, and a different node at the elevational level of the user is selected as the most practically near to that user.			
	6[c]. communicating between at least one transponder to the mobile user and between at least one transponder; the communication between the mobile device of the user and the least one transponder being effected by at least one of a bluetooth or a wi fi protocol thereby to determine the location of the user in the zone through such communication;	29[c]. communicating between at least one transponder to the mobile user and between at least one transponder; the communication between the mobile device of the user and the least one transponder being effected by at least one of a bluetooth or a wi fi protocol thereby to determine the location of the user in the zone through such communication;	30[c]. communicating between at least one transponder to the mobile user and between at least one transponder; the communication between the mobile device of the user and the least one transponder being effected by at least one of a bluetooth or a wi fi protocol thereby to determine the location of the user in the zone through such communication;
	6[d]. arranging the transponders at locations in the zone, and the	29[d]. arranging the transponders at locations in the zone, and the	30[d]. arranging the transponders at locations in the zone, and the

	respective locations of the plurality of transponders in the zone being placed within a building structure;	respective locations of the plurality of transponders in the zone being placed within a building structure;	respective locations of the plurality of transponders in the zone being placed within a building structure;
			30[di]. arranging the transponders in a multi-dimensional sense about the zone, the transponders being distributed in separate mesh networks, and the mesh networks being in different specific zones, and wherein different mesh networks of transponders are associated with a dedicated base station;
	6[e]. obtaining and analyzing data related to the location of the mobile user according to the placement of the transponders in the zone;	29[e]. obtaining and analyzing data related to the location of the mobile user according to the placement of the transponders in the zone;	30[e]. obtaining and analyzing data related to the location of the mobile user according to the placement of the transponders in the zone;
	6[f]. enabling selected mobile communication devices to be in communication with at least one selected communication transponder when the devices are within range of the	29[f]. enabling selected mobile communication devices to be in communication with at least one selected communication transponder when the devices are within range of the selected transponder;	30[f]. enabling selected mobile communication devices to be in communication with at least one selected communication transponder when the devices are within range of the

	selected transponder;		selected transponder;
	6[g]. the mobile user receiving selection parameter data from multiple transponders, and utilizing the selection parameters, such that the system narrows the plurality of transponders to the most practically near transponder, such most practically near transponder not necessarily being the transponder physically closest to the mobile user;		
		29[g]. effecting a location transponder selection by a general wireless communication of multiple location transponder located within communication range in the zone, obtaining unique location transponder radio addresses, searching for wireless devices of at least one subclass, the subclasses being selected to include specific types of wireless communication devices, selectively	

		cell phones, pagers, PDAs, and laptop computers, or by searching for at least one specific wireless device operating in a specific mode;	
	6[h]. associating respective users of respective mobile devices with a respective profile of the respective user of the respective mobile device;	29[h]. associating respective users of respective mobile devices with a respective profile of the respective user of the respective mobile device;	30[h]. associating respective users of respective mobile devices with a respective profile of the respective user of the respective mobile device;
	6[i]. sending a targeted message to a selected mobile device of a selected user from the selected communication transponder when the selected mobile device is in range; and	29[i]. sending a targeted message to a selected mobile device of a selected user from the selected communication transponder when the selected mobile device is in range; and tailoring the targeted message to the profile of the user associated with the mobile device.	30[i]. sending a targeted message to a selected mobile device of a selected user from the selected communication transponder when the selected mobile device is in range; and
	6[j]. tailoring the targeted message to the profile of the user associated with the mobile device.	29[j]. and tailoring the targeted message to the profile of the user associated with the mobile device.	30[j]. tailoring the targeted message to the profile of the user associated with the mobile device.
2. The method of claim 1, wherein the mapping is affected in a three-dimensional sense, selectively being a three-dimensional sense in the x, y, and			

z axes or coordinates and the structure is a building, the building having at least three different floors and there are nodes on the three different floors whereby there are nodes on at least three different levels.			
3. The method of claim 1, wherein the mapping is affected in a three-dimensional sense, selectively being a three-dimensional sense in the x, y, and z axes or coordinates and the structure is a building, the nodes being contained in the building structure at different floors and there are nodes on the different floors whereby there are nodes on at least different levels.			
4. The method of claim 1, wherein the mapping is affected in a three-dimensional sense, selectively being a three-dimensional sense in the x, y, and z axes or coordinates and the structure is a building, the nodes are fixed and non-movable relative to the ground and the nodes are on at least two different levels.			

5. The method of claim 1, wherein the mapping is affected in a three-dimensional sense, selectively being a three-dimensional sense in the x, y, and z axes or coordinates and the structure is a building, the building having different floors and there are nodes on different floors whereby there are nodes at multiple different levels, and the multi-dimensional mapping is effected internally in the building.			
	7. The method of claim 6, wherein the transponders are arranged in a three-dimensional sense, selectively being a three-dimensional sense in the x, y, and z axes or coordinates.		
	8. The method of claim 6, including employing at least one Bluetooth™ equipped mobile personal device associated with at least one user, the at least one device communicating with Bluetooth™ enabled location		

	transponders in a network.		
	9. The method of claim 6, wherein the at least one Bluetooth™ equipped mobile personal device contains at least one specific algorithm to determine the relatively precise location of the at least one user within the network.		
	10. The method of claim 6, wherein when the at least one Bluetooth™ equipped mobile personal device is within the range of certain location transponders, specified events are triggered.		
	11. The method of claim 6, including the downloading of at least one message, to the at least one Bluetooth™ equipped mobile personal device.		
	12. The method of claim 6, including transmitting to selected transponders the location data of the		

	at least one user, the selected transponders transmitting the data to a control center via other transponders within selectively at least one of a network, or intermediate stations.		
	13. The method of claim 6, wherein the location data of the at least one user is processed and analyzed at selectively at least one of a control center or an intermediate station.		
	14. The method of claim 6 including using a geographical zone, the zone being multi-dimensional, and messaging a movable entity that has a transponder or subscriber device, the device being selectively a cell phone, PDA, computer, or device which is configured to be in wireless communication with other devices through a suitable network.		

	15. The method of claim 6, wherein messages are communicated with entities according to the location of the entities as mapped in the multi-dimensional space.		
	16. The method of claim 6, including defining a geographical zone, the zone being multi-dimensional, and messaging or regulating a movable entity that has a transponder or subscriber device, the device being selectively a cell phone, PDA, computer or device which is configured to be in wireless communication with other devices through a suitable network.		
	17. The method of claim 6, including a three-dimensional shape for the geographical zone.		
	18. The method of claim 6, including downloading messages, and wherein the messages are		

	directed to a user when the user is determined to be a particular location in the multidimensional space, and not when the user is outside the particular location.		
	19. The method of claim 6, wherein the profile of the user includes the behavior of the user, and includes the length of time the user spends in the vicinity of different transponders in the zone.		
	20. The method of claim 6, including the downloading of at least one commercial message, selectively an advertisement, to the at least one Bluetooth™ equipped mobile personal device.		
	21. The method of claim 6, including the downloading of a commercial message, selectively an advertisement, to the Bluetooth™		

	equipped mobile personal device.		
	22. The method of claim 6, including transmitting to selected transponders the user's location data, the selected transponders transmitting the data to a control center via other transponders within selectively at least one of a network, relay station, or intermediate supplementing stations.		
	23. The method of claim 6, wherein the profile of the user includes the behavior of the user includes at least one of the length of time the user spends in the vicinity of different transponders in the zone, the purchasing patterns of the user, the product or service preferences of a user; the commercial enquiries of a user, and the dining or entertainment	26. The method of claim 6, wherein the profile of the user includes the purchasing patterns of the user.	27. The method of claim 6, wherein the profile of the user includes the dining or entertainment preferences of the user.

	preferences of the user.		
	24. The method of claim 6 including creating multiple networks, each network communicating with a respective base station, and the respective base stations communicating with each other and a control station, these communications being effected at least in part by at least one of blue tooth or wi fi.		
	25. The method of claim 6 wherein the multi-dimensional zone is such that there are networks at discreet and separate floors of a building, and there being a physical ceiling/floor barrier between each separate floor, and the network being such that with the multiple transponders utilizing selection parameters, the system narrows the plurality of transponders to the most practically		

	near transponder to a user.		
	28. The method of claim 6, wherein a transponder on one floor of a building, even though physically closer to a user is excluded as being a transponder being the most practically near to that user, and that physically further transponder on a different floor to the user is the most practically near to that user.		