signal sequence **606** via uplink beam **130**. In one embodiment, a new correlation quality **508** is determined for the signal sequence **606** received via uplink beam **130** in each time slot during an ongoing call. It should be understood that the method illustrated in FIG. **21** may be used to determine a correlation quality **508** for each uplink beam **130**.

[**0238**] The method of FIG. **21** may be used to decrease processing time since the signal sequence **606** in each uplink beam **130** is correlated with one known training sequence **608** rather than each known training sequence **608**. In particular, the use of **25** relevant signaling information **180** to determine one or more appropriate training sequences **605** decreases the processing time required to determine the correlation quality **508** of each uplink beam **130**.

[**0239**] FIGS. **22** and **23** illustrate a system and method for determining whether to select the beam selection determinations made by fast decision beam selection **30** module **408** or smart decision beam selection module **410** in accordance with an embodiment of the present inventions.

[**0240**] FIG. **22** illustrates a system for determining whether to use fast decision beam selection module **408**, smart decision beam selection module **410**, or neither for selecting an appropriate one or more narrow beams **34** for receiving signals from and/or transmitting signals to one or more mobile station **15**. Processing module **62** comprises fast decision beam selection module **408**, smart decision beam selection module **410**, and fast/smart selection module **416**. As discussed above with reference to FIG. **12**, fast decision beam selection module **408** is operable to determine fast decision beam selections **440** substantially in real time based on the current frame of signals received via one or more beams. And as discussed above with reference to FIGS. **16** and **17**, smart decision beam selection module **410** is operable to determine smart decision beam selections **620**, such as uplink and downlink smart decision beam selections **506** and **507**, based on both current and previous frames of such signals. In some embodiments, smart antenna apparatus **16** switches to the smart decision beam selections **620** determined by smart decision beam selection module **410** in the frame following the current frame. Thus, in some embodiments, there may be a delay of one or more frames between the frame at which uplink signals are received by smart antenna apparatus **16** and the frame at which smart antenna apparatus **16** switches to the appropriate smart decision beam selections **620**. In addition, in some embodiments, since smart decision beam selection module **410** determines smart decision beam selections based on both current and previous frames of signal data, smart decision beam selections **620** are only determined when smart decision beam selection module **410** has information regarding previous frames of the signals being analyzed.

[**0241**] Fast/smart selection module **416** is generally operable to determine whether to select beam selection determinations made by fast decision beam selection module **408**, smart decision beam selection module **410**, or neither for one or more time slots or frames. Generally, fast decision beam selections **440** are used during the initiation of a call or other communication to or from a mobile station **15** since smart antenna apparatus **16** has little or no prior data regarding the mobile link connection with mobile station **15**, and smart decision beam selections **620** are used after the call has been established and smart antenna apparatus **16** has data regarding the location of mobile station **15** from signals received in prior frames. In some embodiments, fast decision beam selections **440** are used for signals received from mobile stations **15** in a random access channel (RACH), such as access request signals. In addition, fast decision beam selections **440** may be used for one or more of initial frames after mobile station **15** has switched to the traffic channel which is used during at least a first portion of the call. In one embodiment, fast decision beam selections **440** are used for RACH signals and for the first time slot after mobile station **15** switches to a traffic channel to support a call, and smart decision beam selections **620** are used for subsequent time slots during the call.

[**0242**] Fast/smart selection module **416** may be a discrete module operable to perform the determine whether to use fast decision beam selections **440** or smart decision beam selections **620** as discussed above, or it may be a distributed system distributed among any number of components of smart antenna apparatus **16**, such as fast decision beam selection module **408**, smart decision beam selection module **410**. For example, in one embodiment, smart decision beam selection module **410** is operable to determine whether to use the smart decision beam selection **620** or the fast decision beam selection **440** for a particular time slot.

[**0243**] The beam selected by fast/smart selection module **416**, which is generally a fast decision beam selection **440** or a smart decision beam selection **620**, may be referred to as a fast/smart beam selection **622**. In some embodiments, fast/smart beam selection **622** is the beam selected for one of the frequencies used by base station transceiver **24**. Thus, smart antenna apparatus **16** may determine a fast/smart beam selection **622** for each frequency used by base station transceiver **24**. In some embodiments, fast/smart beam selections **622** are further processed by central processing unit **118** before being selected as transmitting beam selection **124** or receiving beam selection **126**.

[**0244**] FIG. **23** illustrates a method using fast decision beam selections **440** and smart decision beam selections **620** in smart antenna system **14**. At step **630**, a random access (RACH) burst is communicated by a mobile station **15** and received by receiving system **100** in a particular time slot of a current frame. The burst is communicated to processing module **62** at step **632**. At step **634**, fast decision beam selection module **408** determines a fast decision beam selection **440** substantially in real time based on the burst received in the particular time slot of the current frame. At step **636**, the burst is communicated to base station transceiver **24** via the beam selected as fast decision beam selection **440**.

[**0245**] At step **638**, mobile station **15** switches to a traffic channel for communicating voice or other data signals during the call. In particular, mobile station **15** may switch to a particular traffic channel assigned by base station system **12**. At step **640**, mobile station **15** transmits traffic signals in a first frame of the assigned traffic channel, which are received by receiving system **100** and communicated to processing module **62**. At step **642**, fast decision beam selection module **408** determines a fast decision beam selection **440** based on the traffic signals (which may include a training sequence) received in the first frame. In particular, fast decision beam selection module **408** may determines fast decision beam selection **440** substantially in real time.