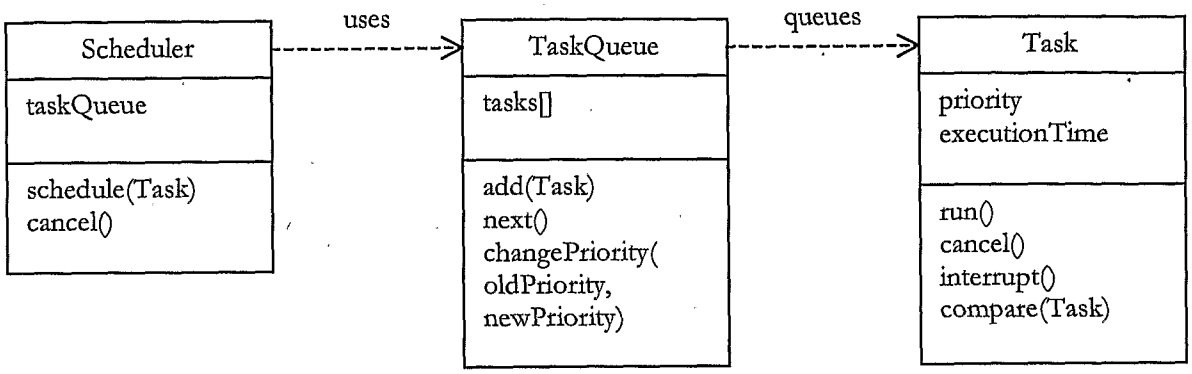


Figure 1

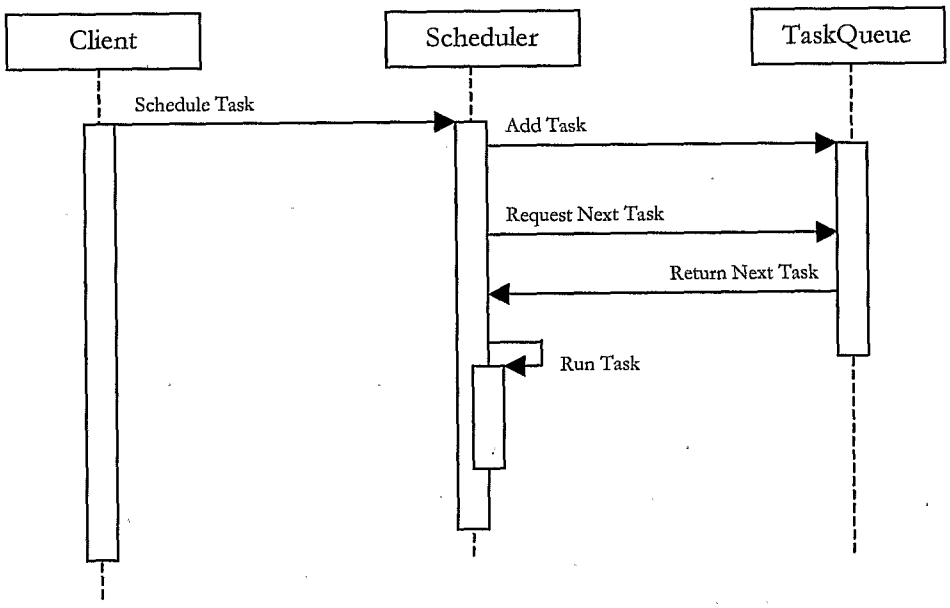


Figure 2

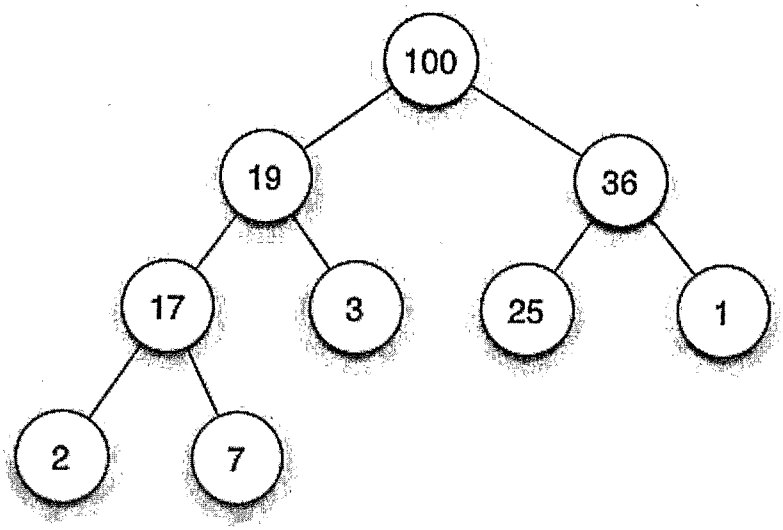


Figure 4

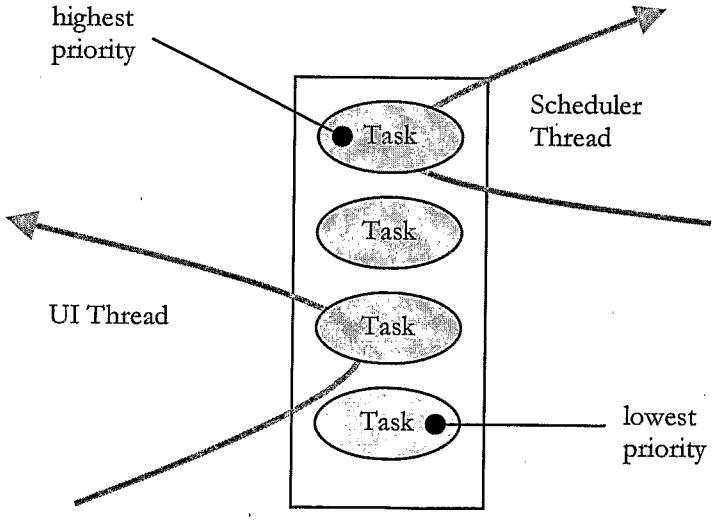


Figure 3

	Lower	*Upper*
Data	3.33%	6.67%
Image	3.33%	6.67%
Audio	10%	90%

Figure 7

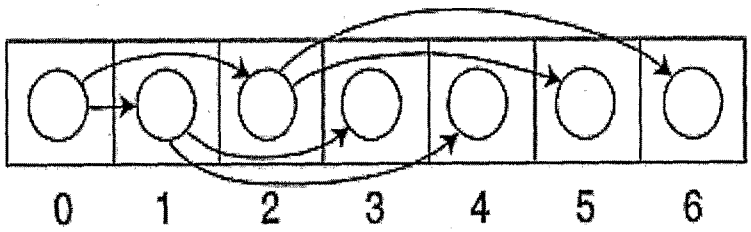


Figure 5

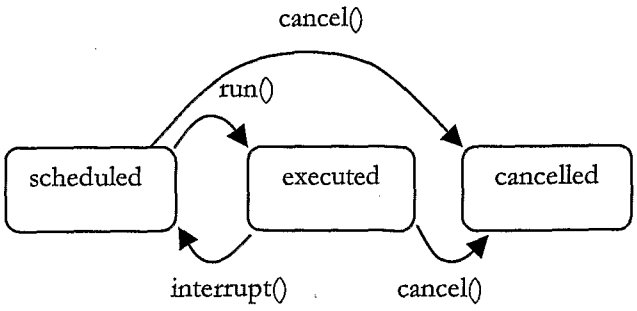


Figure 6

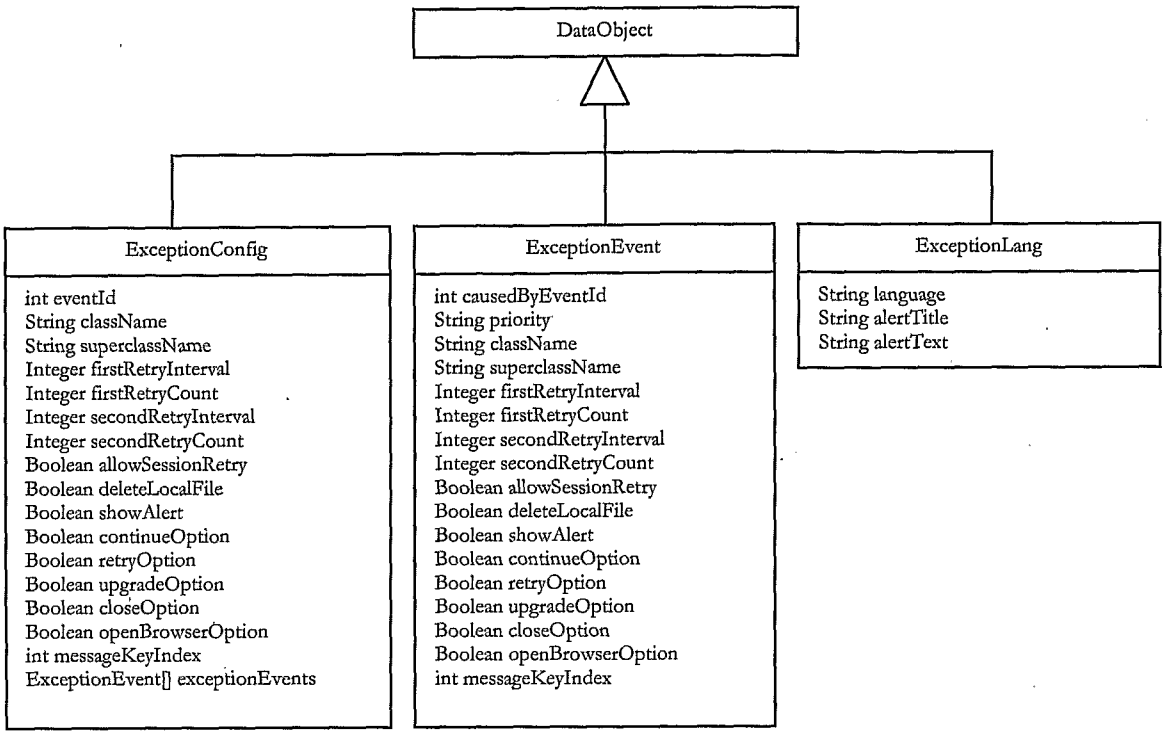


Figure 8

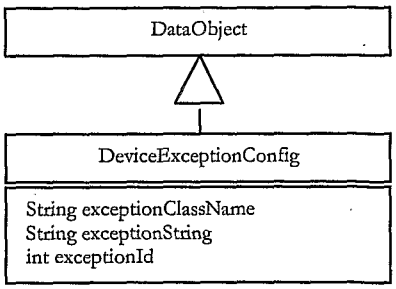


Figure 9

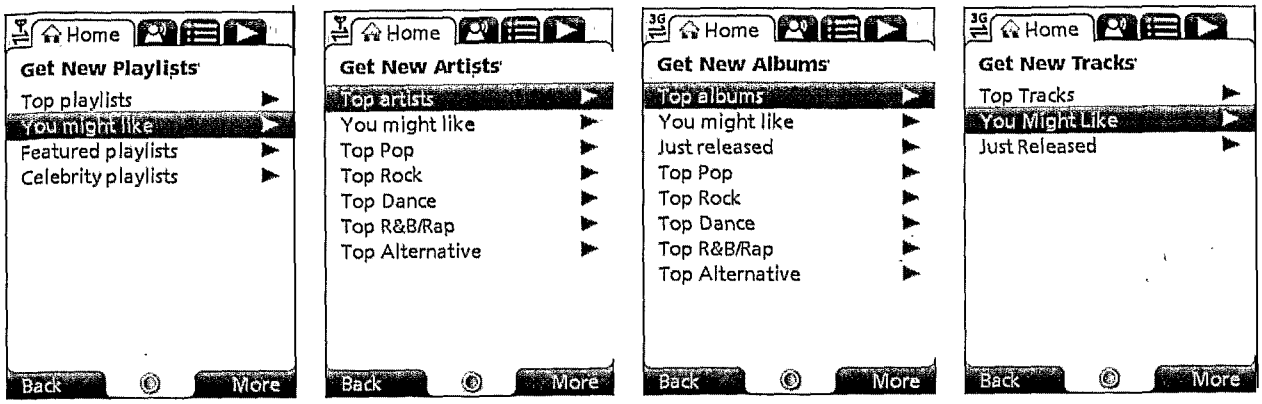


Figure 10

Personalised Menu Item	Recommendations Contained
You Might Like	Playlists / Artists / Albums / Tracks recommended to the customer based on their recent listening habits, and taking into account any explicit music ratings that they have made.
Featured... *Playlists* *Artists* *Albums* *Tracks*	A list of Playlists / Artists / Albums / Tracks that have been editorially pushed for promotion, and personalised for the Playlists / Artists / Albums / Tracks and Genres the customer listens to.
Just Released	A list of back-catalogue Artists / Albums / Tracks that have been recently added to the system. Even those that are new to the system could potentially be old back catalogue releases. This list is based on the customer's recent listening and rating habits.

Figure 11

DRAWING
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Figure 12



Figure 13



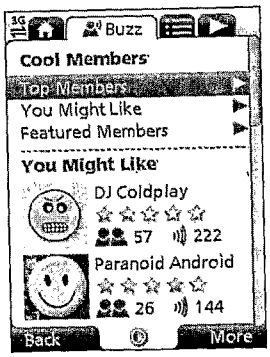




Figure 14

a

	Track1	Track2	Track3	Track4	Track5	Number of Correlations
Track1		12	0	23	78	3
Track2	12		27	0	0	2
Track3	0	27		5	0	2
Track4	23	0	5		10	3
Track5	78	0	15	10		3
Number of Correlations	3	2	3	3	2	

Represents the number of customers who have fully listened to Track1 and Track2 at least twice.

Represents the total number of correlations for Track3 (I.e. non-zero cells).

Figure 16

Personalised Menu Item	Recommendations Contained
Cool members	
You might like	A list of 10 Buzz Members who are deemed similar to this member. This list is generated using this member's rating and listening habits.
Featured Members	A list of Buzz members that have been editorially pushed for promotion, and personalised for the Playlists / Artists / Albums / Tracks and Genres the customer listens to.
Buzz Playlists	
You might like	A list of 10 shared playlists belonging to the Buzz members in the You might like members list.
Featured playlists	A list of Buzz playlists that have been editorially pushed for promotion, and personalised for the Playlists / Artists / Albums / Tracks and Genres the customer listens to.

Figure 15

		a							
		Track1	Track2	Track3	Track4	Track5	Weighting Sum		
b	Track1		34.00	0.00	13.15	44.61	91.77		
	Track2	34.00		76.50	0.00	0.00	110.50		
	Track3	0.00	76.50		2.86	8.58	87.94		
	Track4	13.15	0.00	2.86		5.72	21.73		
	Track5	44.61	0.00	8.58	5.72		58.91		
	Weighting Sum	91.77	110.50	87.94	21.73	58.91			

Figure 17

		a						
		Track1	Track2	Track3	Track4	Track5	PCAs	
b	Track1		0.31	0.00	0.61	0.76		
	Track2	0.31		0.87	0.00	0.00		
	Track3	0.00	0.87		0.13	0.15		
	Track4	0.61	0.00	0.13		0.10		
	Track5	0.76	0.00	0.15	0.10			

Figure 18

a

b		Artist1	Artist2	Artist3	Artist4	Artist5
	Artist1		0.31	0.00	0.61	0.76
	Artist2	0.31		0.87	0.00	0.00
	Artist3	0.00	0.87		0.13	0.15
	Artist4	0.61	0.00	0.13		0.10
	Artist5	0.76	0.00	0.15	0.10	

Figure 19

a

b		Cust1	Cust2	Cust3	Cust4	Cust5
	Cust1		0.31	0.00	0.61	0.76
	Cust2	0.31		0.87	0.00	0.00
	Cust3	0.00	0.87		0.13	0.15
	Cust4	0.61	0.00	0.13		0.10
	Cust5	0.76	0.00	0.15	0.10	

Figure 20

Associations Matrix based on	Inputs to recommendation	Results mechanism
"More like this" Track In the **More like this** scenarios, a seed Track, Album or Artist is selected by the customer. MusicStation then provides a sequence of Tracks, Albums or Artists based on the seed, which can optionally be used as a Playlist by the customer.		
Track Associations Matrix	The seed Track	Sequence of 10 distinct recommended Tracks in descending of order of closeness of fit (i.e. PCA correlation value). Filtered out of this returned list are: ▪ The seed Track. ▪ Tracks that are not available on the customer's service. ▪ Tracks that the customer already owns or has fully listened to. ▪ Tracks, or Tracks from Albums or Artists, that the customer has rated as **Hate it!** Returned Tracks should be from a variety of Artists. No more than 2 Tracks should be for the same Artist.
"More like this" Artist		
Artist Associations Matrix	The seed Artist.	Sequence of 10 distinct recommended Artists in descending of order of closeness of fit (i.e. PCA correlation value). Filtered out of this returned list are: ▪ The seed Artist ▪ Artists that are not available on the customer's service. ▪ Artists for which the customer has already fully listened to 50% of their catalogue. ▪ Artists that the customer has rated as **Hate it!**

Figure 21

<table>
<tr><td colspan="3">"More like this" Album</td></tr>
<tr><td>Artist** Associations Matrix</td><td>The seed Artist of the Release.</td><td>Sequence of 10 distinct recommended Albums (Releases), based on a cross-section of the Albums produced by the Artists with the highest closeness of fit (i.e. PCA correlation value).

Filtered out of this returned list are:
▪ The seed Album.
▪ Albums that are not available on the customer's service.
▪ Albums for which the customer has already fully listened to at least 50% of the Tracks.
▪ Albums that the customer has rated as Hate it!, and Albums from Artists that the customer has rated as Hate it!

Returned Albums should be from a variety of Artists. No more than 2 Albums should be for the same Artist.</td></tr>
<tr><td colspan="3">Tracks "You might like"
Tracks, Albums, Artists, and Playlists that "You might like" is a sequence of 10 recommended Tracks, Albums, Artists, and Playlists that are based upon your recent listening habits. The list is available form the Artist/Album/Track/Playlist screens.</td></tr>
<tr><td>Track Associations Matrix</td><td>10 distinct Tracks made up of:
▪ The most recent Tracks rated a Love It! (up to a maximum of 5)
▪ The most recent Tracks that have been fully-listened to at least twice, to make up the remaining Tracks.
Excluded as inputs are Tracks the customer had flagged as Hate It! Regardless of how many times listened to.</td><td>Sequence of 10 distinct recommended Tracks in descending of order of closeness of fit (i.e. PCA correlation value).

Filtered out of this returned list are:
▪ The seed Tracks.
▪ Tracks that are not available on the customer's service.
▪ Tracks that the customer already owns or has fully listened to.
▪ Tracks, or Tracks from Albums or Artists, that the customer has rated as Hate it!

Additionally the system will seek to return the best correlated two new Tracks that are one-week old new releases in the system, replacing the least highly correlated Tracks in the 10 returned.

Returned Tracks should be from a variety of Artists. No more than 2 Tracks should be for the same Artist.</td></tr>
</table>

Figure 22

Artists "You might like"		
Artist Associations Matrix	10 distinct Artists made up of: ▪ The most recent Artists rated a **Love It!** (up to a maximum of 5) ▪ The most recent Artists for which Tracks have been fully-listened to at least twice, to make up the remaining Artists. Excluded as inputs are Artists the customer had flagged as **Hate It!** Regardless of how many times listened to.	Sequence of 10 distinct recommended Artists in descending of order of closeness of fit (i.e. PCA correlation value). Filtered out of this returned list are: ▪ The seed Artists. ▪ Artists that are not available on the customer's service. ▪ Artists for which the customer has already fully listened to 50% of their catalogue. ▪ Artists that the customer has rated as **Hate it!** Additionally the system will seek to return the best correlated two new Artists that are one-week old new releases in the system, replacing the least highly correlated Artists in the 10 returned.
Albums "You might like"		
Artist Associations Matrix	10 distinct Artists made up of: ▪ The most recent Artists rated a **Love It!** (up to a maximum of 5) ▪ The most recent Artists for which Tracks have been fully-listened to at least twice, to make up the remaining Artists. Excluded as inputs are Artists the customer had flagged as **Hate It!** Regardless of how many times listened to.	Sequence of 10 distinct recommended Albums in descending of order of closeness of fit (i.e. PCA correlation value). Filtered out of this returned list are: ▪ The seed Albums. ▪ Albums that are not available on the customer's service. ▪ Albums for which the customer has already fully listened to at least 50% of the Tracks. ▪ Albums that the customer has rated as **Hate it!**, and Albums from Artists that the customer has rated as **Hate it!** Additionally the system will seek to return the best correlated two Artists that are one-week old new releases in the system, replacing the least highly correlated Artists in the 10 returned. Returned Albums should be from a variety of Artists. No more than 2 Albums should be for the same Artist.

Figure 23

<table>
<tr><td colspan="3">Albums "You might like"</td></tr>
<tr><td>Artist Associations Matrix</td><td>10 distinct Artists made up of:
The most recent Artists rated a Love It! (up to a maximum of 5)
The most recent Artists for which Tracks have been fully-listened to at least twice, to make up the remaining Artists.
Excluded as inputs are Artists the customer had flagged as Hate It! Regardless of how many times listened to.</td><td>Sequence of 10 distinct recommended Albums in descending of order of closeness of fit (i.e. PCA correlation value).

Filtered out of this returned list are:
The seed Albums.
Albums that are not available on the customer's service.
Albums for which the customer has already fully listened to at least 50% of the Tracks.
Albums that the customer has rated as Hate it!, and Albums from Artists that the customer has rated as Hate it!
Additionally the system will seek to return the best correlated two Artists that are one-week old new releases in the system, replacing the least highly correlated Artists in the 10 returned.

Returned Albums should be from a variety of Artists. No more than 2 Albums should be for the same Artist.</td></tr>
<tr><td colspan="3">"Recommended Members"
Recommended members are customers that are similar to the source customer based upon rating and listening habits. They are listed on the Cool Members screen on the Buzz tab.</td></tr>
<tr><td>Customer Associations Matrix</td><td>The current customer.</td><td>Sequence of 10 distinct recommended Customers in descending of order of closeness of fit for the customer's service.

Filtered out of this returned list are:
Customers who are already friends.
Customers who have been blocked.
Additionally the system will seek to return the best correlated two new Customers that are one-week old new releases in the system, replacing the least highly correlated Customers in the 10 returned.</td></tr>
</table>

Figure 24

Playlists "You might like" Playlists "You might like" are Playlists that have been shared by other MusicStation customers within the same service. Accessed from the Playlists screen and also listed on the Buzz tab Cool Playlists screen.		
Customers Associations Matrix	The current customer.	Sequence of 10 distinct recommended Playlists taken from the customers who are closest to the current customer, in descending of order of closeness of fit. Filtered out of this returned list are: ▪ Playlists from customers who are already friends. ▪ Playlists from customers who have been blocked. ▪ Playlists that the customer has already listened to at least once. ▪ Playlists for which the customer has already fully listened to at least 50% of the Tracks. ▪ Playlists that the customer has in their library. ▪ Playlists that the customer has rated as **Hate it!** Additionally the system will seek to return the best correlated two new Customers that are one-week old new releases in the system, replacing the least highly
Inbox – editorial and promotional. Inbox items are directed to the customer based on what they listen to. An extension of this would be to supply news on Artists that we THINK they may be interested in based upon our Artists correlations matrix.		
Artist Associations Matrix	As per "Artists "You might like".	As per "Artists "You might like".

Figure 25

	Average plays per customer	Normalized Plays (X - MEAN) / STDEV	Rating Value (2.5 + NORMALISED PLAYS)
Angels - Robbie Williams	12.90	1.95	4.45
Country House - Blur	4.60	-0.01	2.49
Life on Mars - David Bowie	3.30	-0.32	2.18
Yellow - Coldplay	1.23	-0.81	1.69
Bohemian Rhapsody - Queen	4.01	-0.15	2.35
I Luv Ya - Atomic Kitten	1.89	-0.65	1.85
Average overall plays per customer	4.66		
Standard Deviation	4.23		

Figure 26

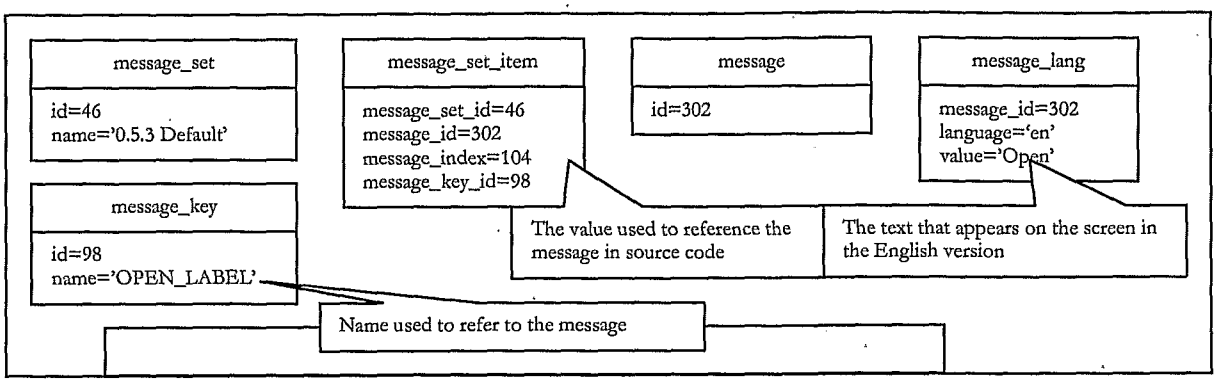


Figure 27

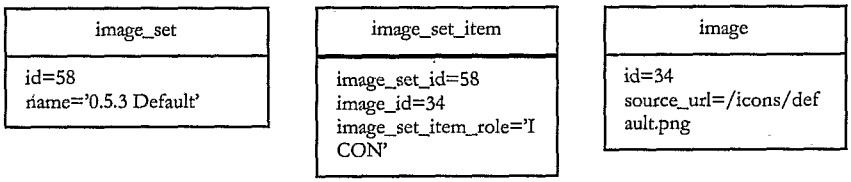


Figure 28

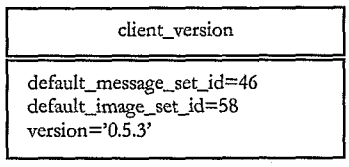


Figure 29

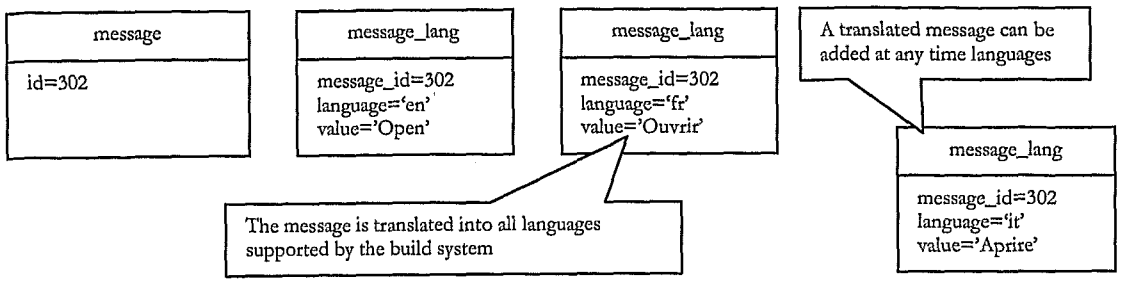


Figure 30

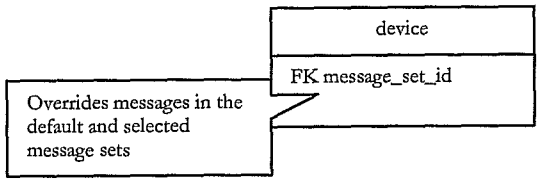


Figure 31

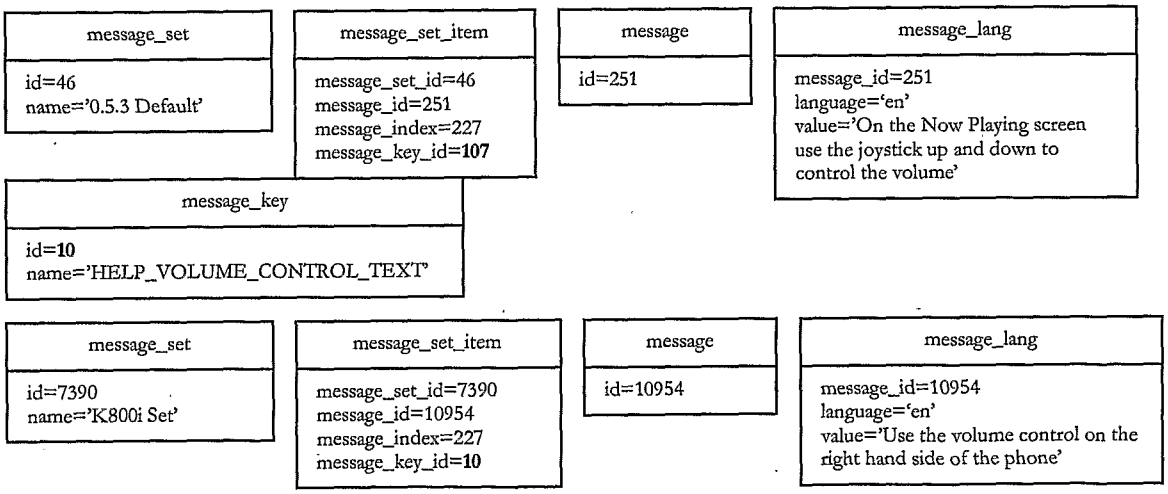


Figure 32

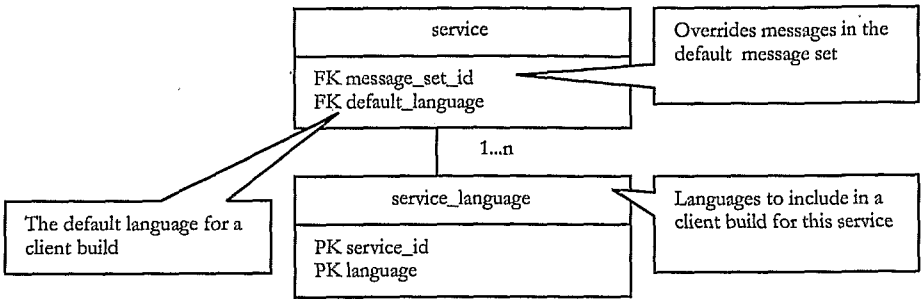


Figure 33

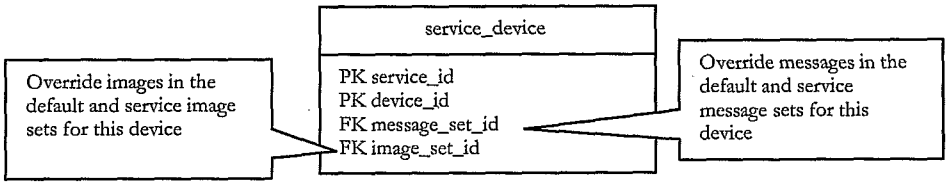


Figure 34

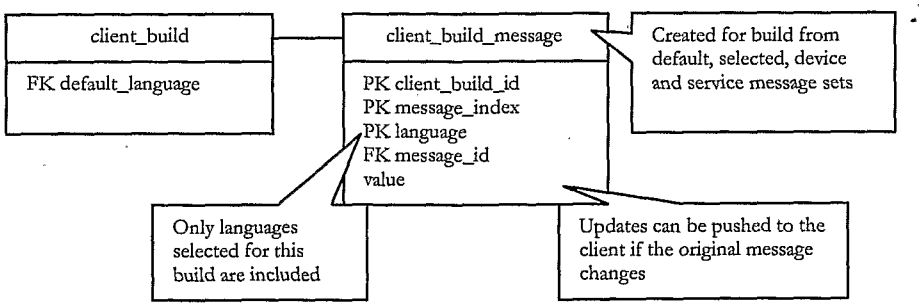


Figure 35

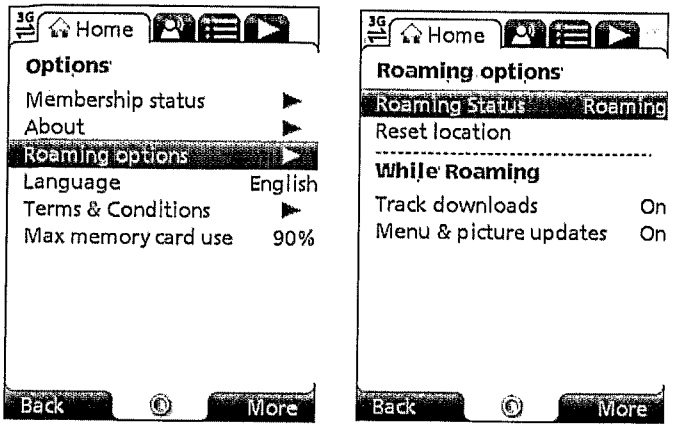


Figure 36

Option	Description
Roaming Status	The phone's current roaming status. This will show *Home* if the user is not roaming and will show *Roaming* if the user is roaming.
Track Downloads	The user can set this option *On* to download tracks (with additional charges) when roaming without a prompt. The user set this option to *Off* to prevent the downloading tracks when roaming or *Ask* to cause the following prompts.
Menu & picture updates	The user can set this option *On* to update menu items and pictures (with additional charges) when roaming without a prompt. The user set this option to *Off* to prevent menu and picture updates when roaming or *Ask* to cause the following prompts.

Figure 37

DRAWING
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DRAWING
LEFT
BLANK

Figure 38

DRAWING
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BLANK

DRAWING
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BLANK

Figure 39

DRAWING
LEFT
BLANK

DRAWING
LEFT
BLANK

Figure 40

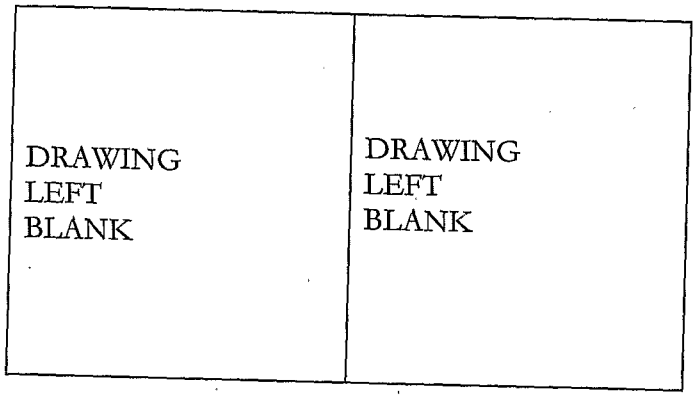


Figure 41

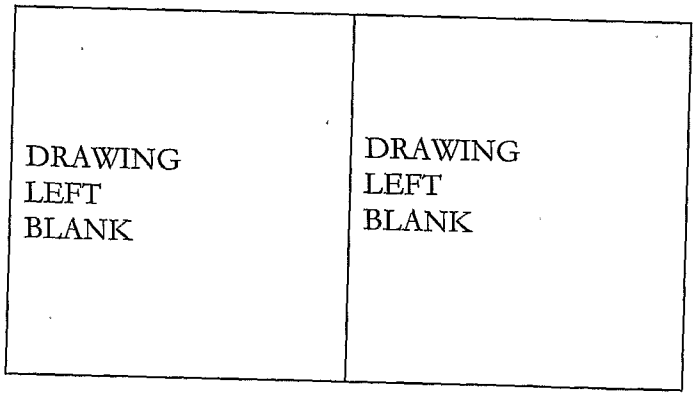


Figure 42

Message Title shown on Inbox screen	Message Content	Result
Friend Request Accepted *OtherMemberName*	*OtherMemberName* has approved your friend request. You can now both send each other tracks, playlists and messages.	OtherMemberName is added to this user's friends and this user is added to OtherMemberName's
Friend Request Denied *OtherMemberName*	*OtherMemberName* has denied your friend request.	No change to either member's friends lists. This member can resubmit their friend request.
Friend Requests Blocked *OtherMemberName*	*OtherMemberName* has blocked all friend requests from you.	This member will have all friend requests to this other member blocked automatically. The other member will never see requests from this member again.

Figure 43

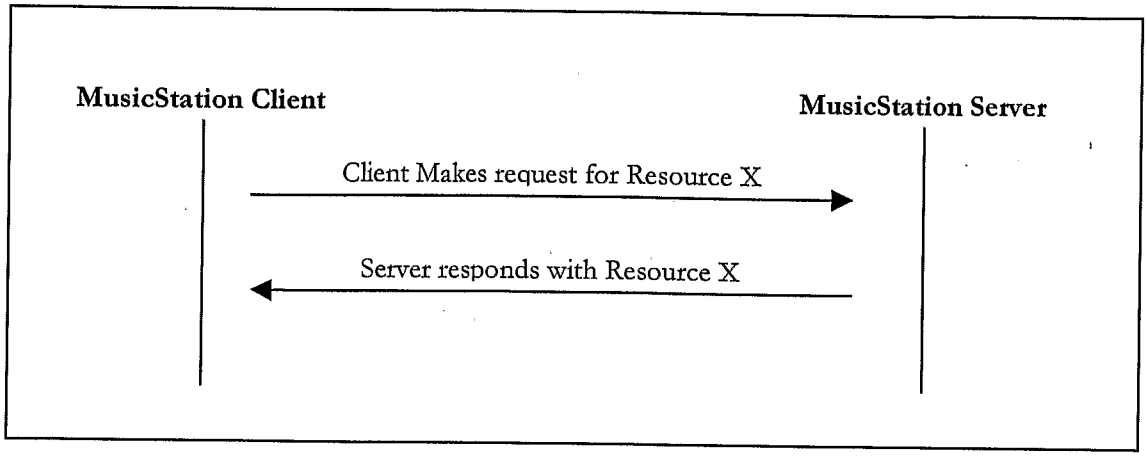


Figure 44

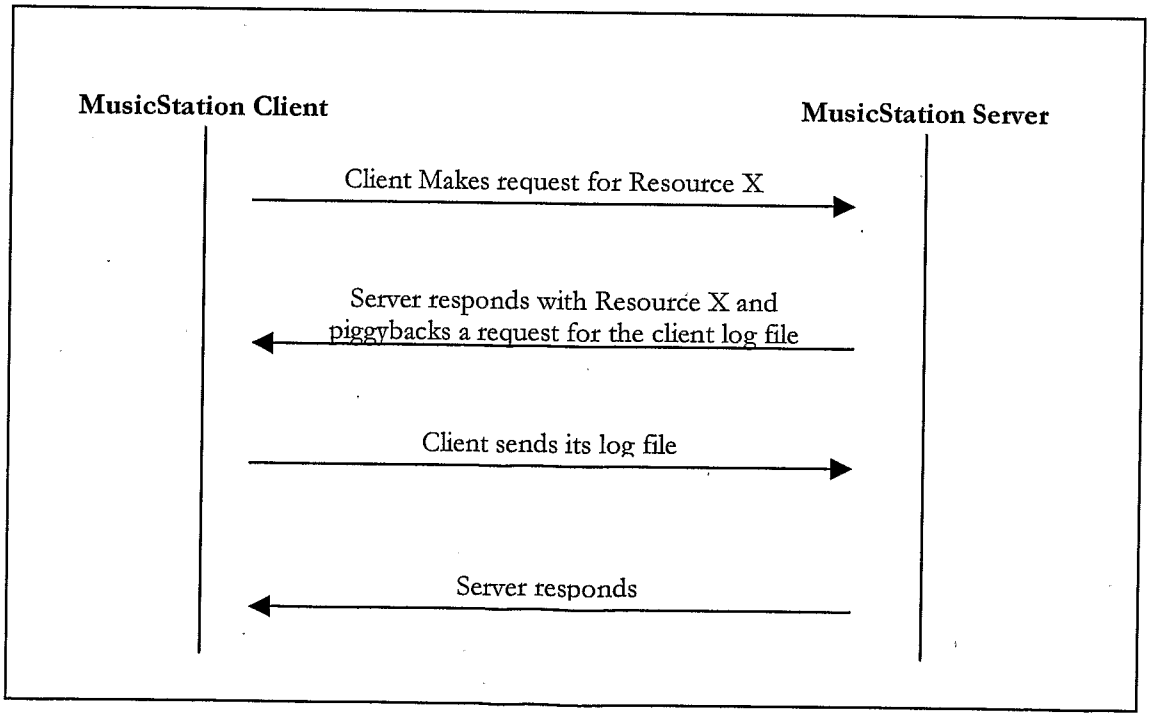


Figure 45

`[major].[minor].[micro]`	Represents the version number in the format major version.minor version.micro version. For example 0.4.6.
`Variant name`	Then a variant name which will be defined for each variant. Currently this will be one of "MIDP", "Symbian", "WindowsMobile", "MusicMate".
`Platform identifier`	**The variant is followed by a space character, and then a platform identifier. The platform identifier is the device code from the db. This platform identifier will differ for each variant. This platform identifier may contain spaces, and will generally be used to perform a look up in the database for the properties of that device.**

Figure 46

`error.data`	is the name of the resource being sent to the server.
`ackId=1`	is an acknowledgment id. This is the id that will be echoed back to the client by the server in the acknowledgement line (see section 3.2.6). The client must generate this acknowledgement id in a way that it can uniquely identify which put data a received acknowledgement is for.
`offset=0`	The next part is an offset number of bytes. This offset is how many bytes into the body of the message that this data starts.
`length=160`	The next part is a length number of bytes. The length is how many bytes long the data in the body of the message is.
`type="application/octet-stream"`	The final part is the content type. This will almost always be the content type for our data objects. Therefore this may be redundant information, but it has been left in the protocol because images being transferred may not necessarily be wrapped in a data object.

Figure 47

```
MSTP/0.1
RequestId: 123463
Client: MusicStation 0.4.6 MIDP Nokia/N70
UserGUID: AB12YZ
Put: error.data; ackId=1; offset=0; length=160; type="application/octet-stream"

01001110001001001000100010111111000101010
10010100101111111111000001111000000001000
10000100100000010000111000111111000011111
01010101010101101010101101011101101101110
```

Figure 48

```
MSTP/0.1
RequestId: 123464
Client: MusicStation 0.4.6 MIDP Nokia/N70
UserGUID: AB12YZ
Put: error.data; ackId=2; offset=0; length=160; type="application/octet-stream"
Put: photo.jpeg; ackId=3; offset=160; length=320; type="image/jpeg"

01001110001001001000100010111111000101010
10010100101111111111000001111000000001000
10000100100000010000111000111111000011111
01010101010101101010101101011101101101110
01000011100010101011011011011010000000010
10101101101101101000000011000011100010010
00111000101010110110110110100000111000001
00011100000111000001110000011100000011100
01101101101000011100000011011011010000011
01101101101000011100000011011011010000011
10000001101101101000011100000011011011101
11011010000111000000110110110100011011101
```

Figure 49

```
MSTP/0.1
RequestId: 123465
Client: MusicStation 0.4.6 MIDP Nokia/N70
UserGUID: AB12YZ
Put: photo.jpeg?name=Fave%20Tracks; ackId=4; offset=0; length=160; type="image/jpeg"

01001110001001001000100010111111000101010
10010100101111111111000001111000000001000
10000100100000010000111000111111000011111
01010101010101101010101101011101101101110
```

Figure 50

Success	1000
Success, client roaming	1100
Unauthorized	4010
Unauthorized IP Address	4011
Forbidden	4030
Internal Server Error	5000
Service Unavailable	5030
Unsupported Version	5050

Figure 51

```
MSTP/0.1
StatusCode: 1000
ResponseId: 234570
Sent: news1.data; ackId=20060619111100NEWS1; offset=0; length=160;
type="application/octet-stream"

01001110001001001000100010111111000101010
10010100101111111110000011111000000001000
10000100100000010000111000111110000011111
01010101010101101010101101011101101101110
```

Figure 52

```
MSTP/0.1
StatusCode: 1000
ResponseId: 234571
Sent: news2.data; ackId=20060619111200NEWS2; offset=0; length=160;
type="application/octet-stream"
Sent: news3.data; ackId=20060619111200NEWS3; offset=160; length=160;
type="application/octet-stream"

01001110001001001000100010111111000101010
10010100101111111111000001111100000000001000
10000100100000010000111000111111000011111
01010101010101101010101101011101101101101110
01001110001001001000100010111111000101010
01010101010101101010101101011101101101101110
10010100101111111111000001111100000000001000
10000100100000010000111000111111000011111
```

Figure 53

```
MSTP/0.1
StatusCode: 1000
ResponseId: 234572
Sent: news1.data; ackId=20060619111200NEWS1; offset=0; from=160; length=40;
type="application/octet-stream"

01010101010101101010101101011101101101101110
```

Figure 54

```
MSTP/0.1
StatusCode: 1000
ResponseId: 234573
Sent: news1.data; ackId=20060619111230NEWS1; offset=0; length=40;
type="application/octet-stream"
Sent: command.data; ackId=20060619111230NEWS2; offset=40; length=40;
type="application/octet-stream"

01010101010101101010101101011101101101101110
01001110001001001000100010111111000101010
```

Figure 55

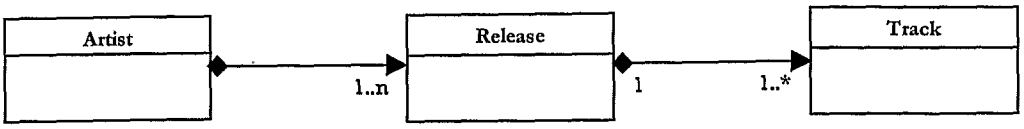


Figure 56

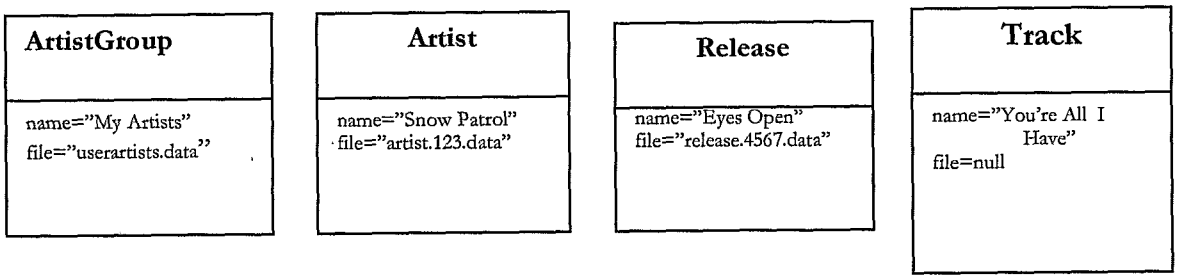


Figure 57

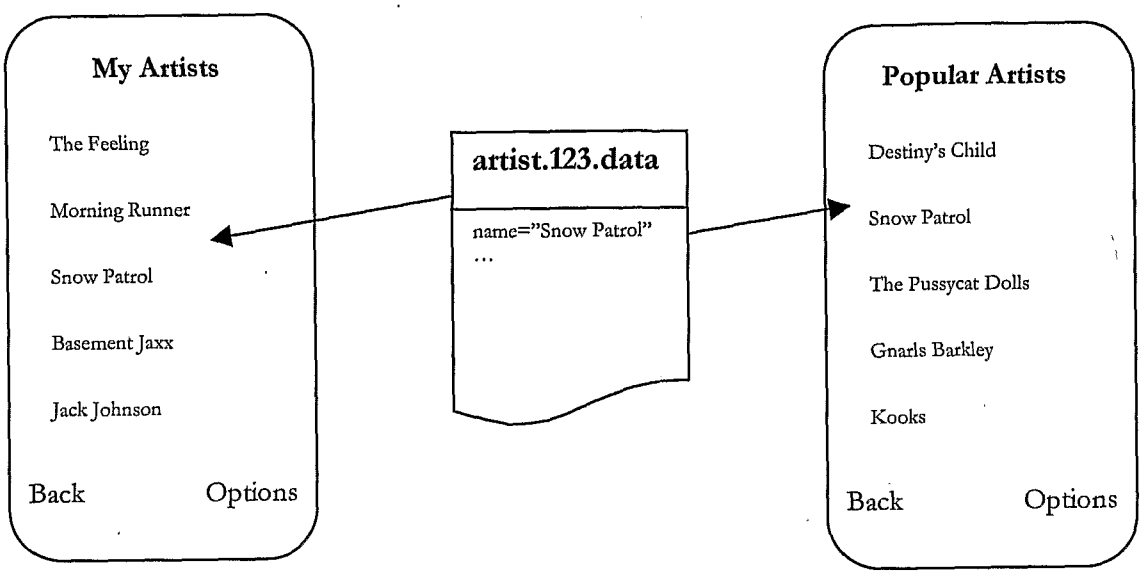


Figure 58

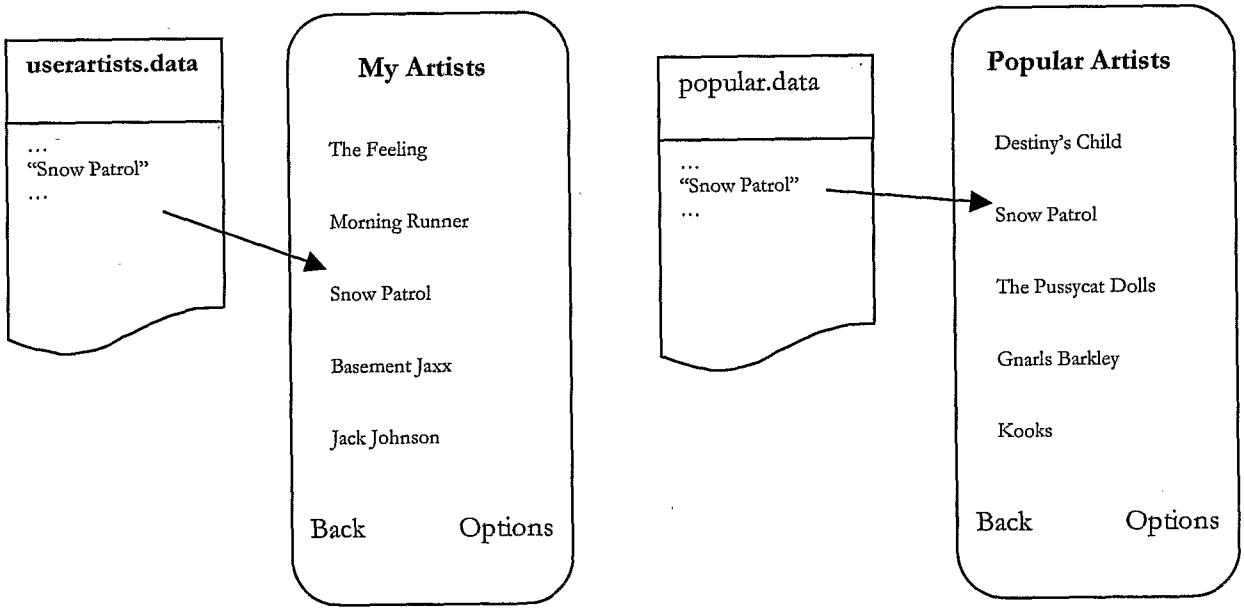


Figure 59

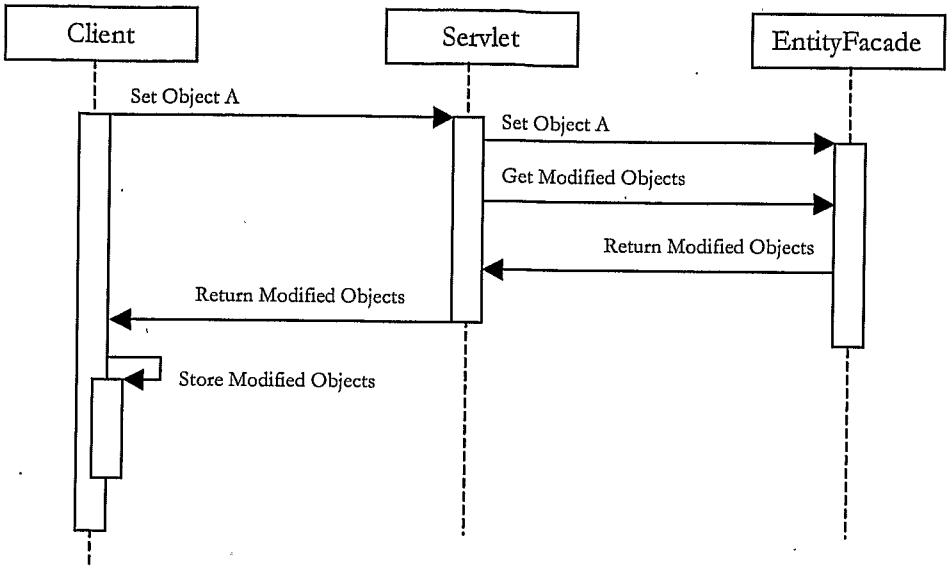

Client
Servlet
EntityFacade
Set Object A
Set Object A
Get Modified Objects
Return Modified Objects
Return Modified Objects
Store Modified Objects

Figure 60

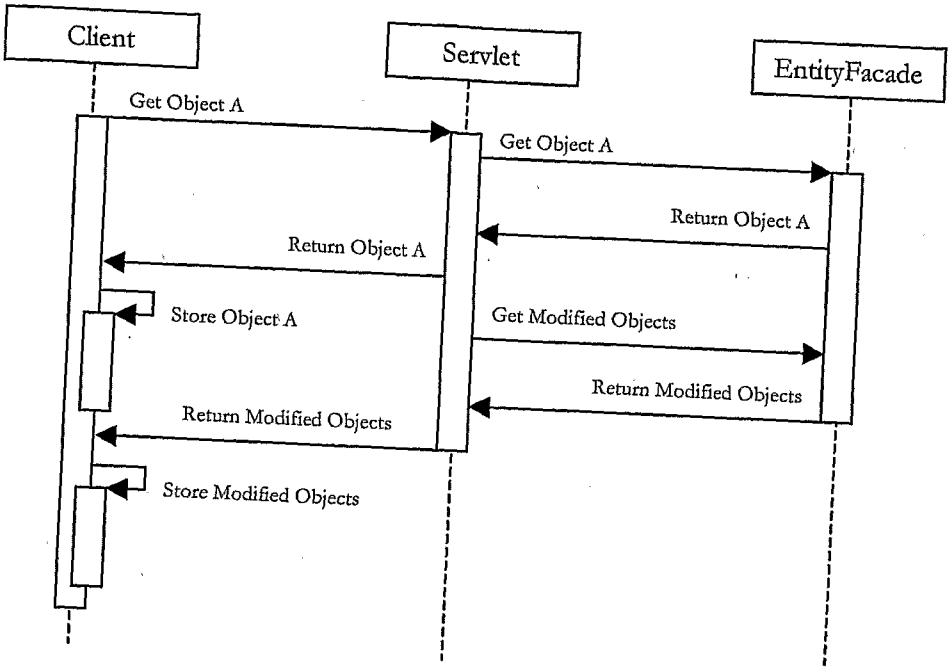

Client
Servlet
EntityFacade
Get Object A
Get Object A
Return Object A
Return Object A
Store Object A
Get Modified Objects
Return Modified Objects
Return Modified Objects
Store Modified Objects

Figure 61

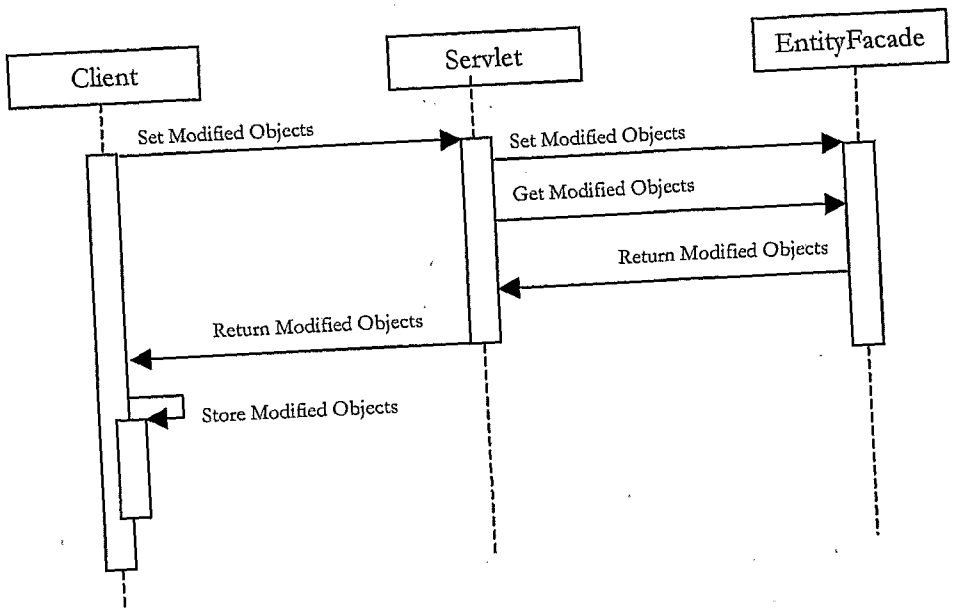

Client
Servlet
EntityFacade
Set Modified Objects
Set Modified Objects
Get Modified Objects
Return Modified Objects
Return Modified Objects
Store Modified Objects

Figure 62

object_change_log
object_guid
object_type
object_modified_date
object_modified_type (addition, replace, deletion)
priority

Figure 63

customer_object
customer_id
object_guid
object_type
object_created_date
object_modified_date
object_last_used_date
object_deleted_date

Figure 64

customer_object_change_log
customer_id
object_guid
object_type
object_modified_date
object_modified_type (addition, replace, deletion)
priority
acknowledgement_id
acknowledgement_date

Figure 65

ChangeLogRecord
objectGUID
objectModifiedDate
objectModifiedType (ADDITION, REPLACE, DELETION)
acknowledgementId
acknowledgementDate

Figure 66

object_guid	object_modified_date	object_modified_type	priority
SnowPatrolXYZ	18/07/2006 13:16:33	REPLACE	3
EyesOpenXYZ	18/07/2006 13:16:33	ADDITION	3

Figure 67

customer_id	object_guid	object_modified_date	object_modified_type	priority
567	SnowPatrolXYZ	18/07/2006 13:16:33	REPLACE	3

Figure 68

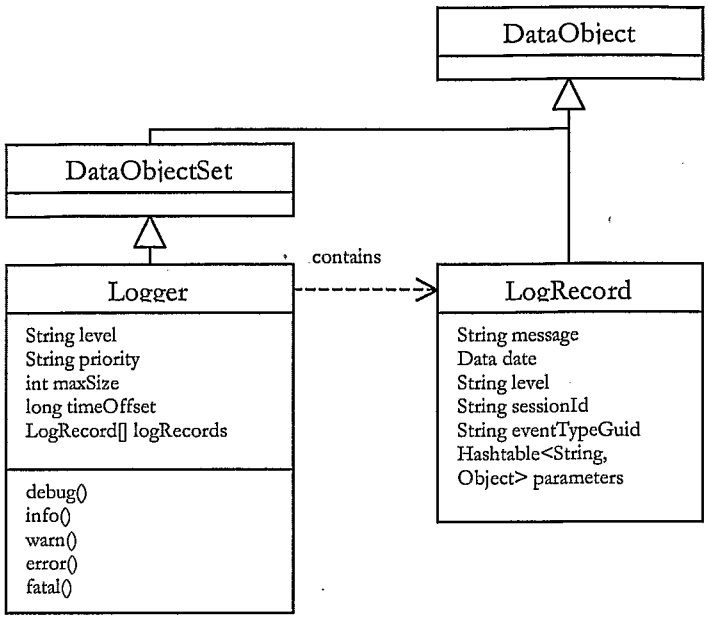


Figure 69

customer_logger	type	constraint	default	comments
customer_id	NUMBER(10)	Mandatory		Foreign key in customer
level	VARCHAR2(256)	Mandatory Allow values: DEBUG, INFO, WARN, ERROR, OFF	INFO	Level of logging output on client
priority	VARCHAR2(256)	Mandatory Allow values: MIN, NORMAL, MAX	NORMAL	Task priority for sending log records to the server
max_size	VARCHAR2(32)	Mandatory	100	Maximum number of log records stored on client

Figure 70

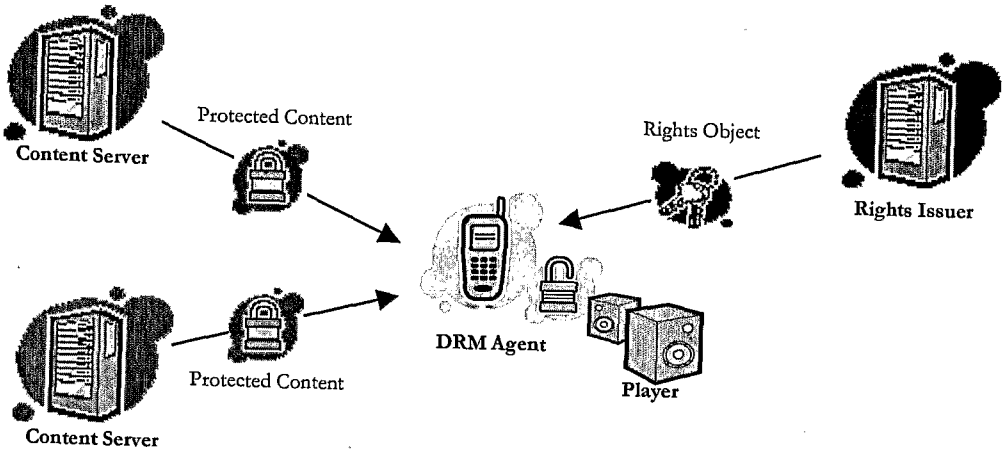

Content Server
Protected Content
Rights Object
Rights Issuer
DRM Agent
Player
Protected Content
Content Server

Figure 71

Parameter	Req'd?	Description
Version	Yes	A <major.minor> representation of the highest MusicStation protocol version supported by this device.
Software Licence	Yes	The 512 bit number installed on the device relating the application to a particular MusicStation Service.
Application GUID	Yes	The Application GUID is embedded in the MusicStation handset software at build time. It is a unique identifier of the specific build of the MusicStation application particular to the device's manufacturer, model, version and firmware revision level.
IMEI	No†	International Mobile Equipment Identity number, globally unique idenitifer of every mobile phone. Some handsets provide access to the IMEI from Java, where this is the case it is retrieved and sent to the Server as part of the MusicStation Service Registration Request.
Bluetooth Address	No†	The unique address used to identify a Bluetooth device and therefore a globally unique method of identifying the handset. The J2ME Bluetooth API (JSR-82) provides a method to obtain the Bluetooth Address. Where this is supported it is retrieved and sent to the Server as part of the MusicStation Service Registration Request.
IMSI	No†	International Mobile Subscriber Identity number, unique to every mobile phone user, stored in the SIM. The IMSI is available as a system property on some J2ME devices. Where this is supported it is retrieved and sent to the Server as part of the MusicStation Service Registration Request.
MSISDN	No	MSISDN is the full international number associated with a mobile phone starting with the country code. The MSISDN is available as a system property on some J2ME devices. Where this is supported it is retrieved and sent to the Server as part of the MusicStation Service Registration Request.

Figure 72

Metadata Item	Req'd?	Description
MSISDN	No†	As above.
Party ID	No†	Internal MNO unique identification for subscriber. Generally used if MSISDN is deemed too sensitive to place inside communications headers which go outside of the MNO network.
IMEI	No	As above.

Figure 73

Parameter	Req'd?	Description
Status	Yes	Indicates if the MusicStation Registration Request resulted in a successful registration. Values include: • "Success"- registration was successful. • "Access Denied" – the device was not authorised. • "Malformed Request" - the CA failed to parse the Device's request, for example both IMEI and Bluetooth Address were missing from the request. • "UnsupportedVersion" - indicates that the device used a protocol version not supported by the CA.
Client GUID	Yes†	Uniquely identifies the device to the CA or RI and is sent by the device in every request to the MusicStation Server or RI.
Client Certificate	Yes†	The MusicStation handset application's public key certificate signed by the CA using the MusicStation Root CA Certificate.
Client Private Key	Yes†	The RSA 1024 bit private key used by the device to • Decrypt messages that have been encrypted using its public key. • Sign messages that can be validated using its public key.

Figure 74

Parameter	Req'd?	Description
Version	Yes	A <major.minor> representation of the highest MusicStation protocol version supported by this device.
Client GUID	Yes	Uniquely identifies the device to the RI and is sent by the device in every request to the RI.
Request Time	Yes	The current time as measured by the Device as the difference, measured in milliseconds, between the current time and midnight, January 1, 1970 UTC.
Client Certificate	Yes	The MusicStation handset application's public key certificate signed by the CA using the MusicStation Root CA Certificate.

Figure 75

Parameter	Req'd?	Description
Status	Yes	Status indicates if the RI Registration Request was successful. To succeed the Software Licence must be unlocked. If the RI Registration Request was unsuccessful then one of the following error codes results: • "AccessDenied" - Device is not authorised to contact the RI. • "MalformedRequest" – RI failed to parse the Device's request. • "UnsupportedVersion" – Device used a protocol version not supported by the RI. • "InvalidCertificate" - RI could not verify the signature on the Client Certificate due to the certificate being invalid in some way. • "DomainFull" - no more Devices are allowed to join the Domain. • "DomainAccessDenied" – RI does not allow the Device access to the Domain, or the Client Certificate can not be authorised without more information.
Session ID	Yes†	The session identifier set up by the RI.
RI ID	Yes†	Identifies the RI to the Device. It may be possible for the Device to obtain rights from more than one RI. In this case the RI ID uniquely identifies each RI.
RI URL	Yes†	If the RI Registration Request message was successful then the RI URL parameter indicates the URL that should be stored in the RI Context. The Device uses this URL in later interactions with the RI to send requests for ROs. The RI URL is an absolute identifier. There can be more than one RI URL so that the Device can have a fail-over RO request capability.
Domain Info	Yes†	Carries the Domain Key (encrypted using the Device's 1024 bit RSA Client Public Key) as well as information about the maximum lifetime of the Domain. See Appendix A for more detail on DK encryption.

Figure 76

Parameter	Req'd?	Description
Client GUID	Yes	Uniquely identifies the requesting Device to the RI, sent in every request to the RI.
Domain ID	Yes	Identifies the Domain for which the requested ROs shall be issued.
RI ID	Yes	Identifies the authorising RI.
Request Time	Yes	Measured by the Device as the difference, in milliseconds, between the current time and midnight, January 1, 1970 UTC.
RO Info	Yes	Identifies the requested Rights Object(s). The parameter consists of a (non-empty) set of Rights Object identifiers specifying which ROs are being requested.

Figure 77

Parameter	Req'd?	Description
Status	Yes	Status indicates if the RO Acquisition Request was successful. If the request was unsuccessful then one of the following error codes results: • "AccessDenied" - Device is not authorised to contact the RI, for example see Client Certificate Revocation below. • "MalformedRequest" - RI failed to parse the Device's request. • "UnsupportedVersion" - Device used a protocol version not supported by the RI. • "NotFound" - Requested object was not found. • "NotRegistered" - Device tried to contact an RI with which it was not previously registered. • "RightsExpired" - Requested rights are no longer available for this Device. This response code indicates to the device that it should not make further attempts to acquire these rights.
Client GUID	Yes†	Identifies the requesting Device. The value returned here must equal the Client GUID sent by the Device in the RO Acquisition Request message that triggered this response.
RI ID	Yes†	Identifies the RI. The value must equal the RI ID sent by the Device in the preceding RO Acquisition Request message.
Protected ROs	Yes†	The Rights Objects in which sensitive information (such as the CEK) is encrypted using the Rights Encryption Key (REK). The REK is encrypted using the customer's Domain Key.

Figure 78

Parameter	Req'd?	Description
DCF File	Yes	Identifies the DCF (encrypted music file) requested for download.
Client GUID	Yes	Identifies the requesting Device.
Range	No	Used to request part of a file if it has already been partially downloaded.

Figure 79

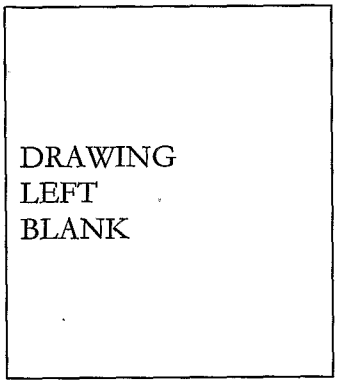


Figure 80

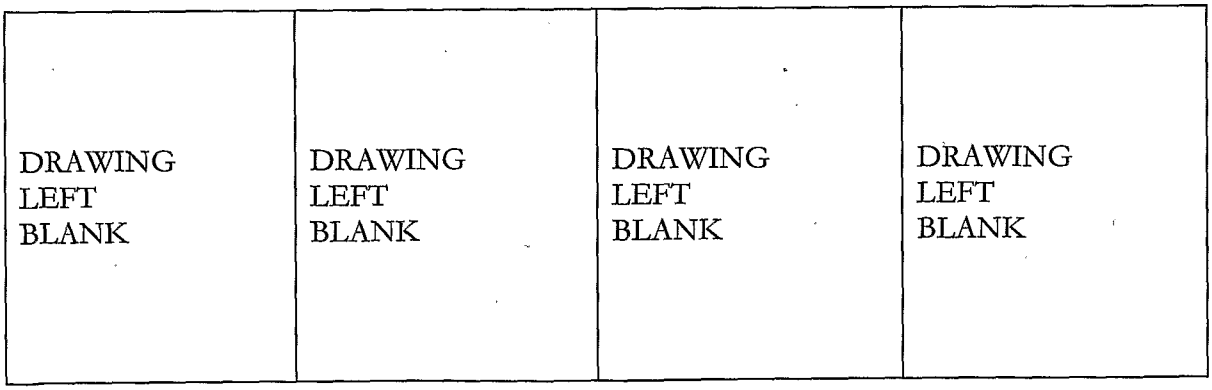


Figure 81

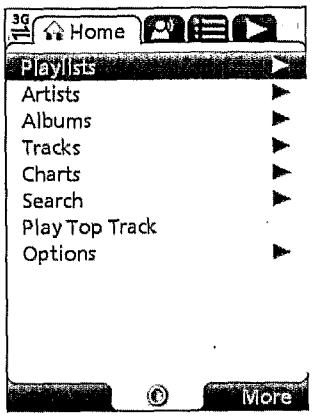


Figure 82

Joystick Action	Function
Joystick right	Switch to the next tab to the right
Joystick left	Switch to the next tab to the left
Joystick down/hold	Move to the next item on a list or menu/Fast move through menu
Joystick up/hold	Move to the previous item on a list or menu/Fast move through menu
Joystick press	Open the selected menu option or perform the default action on the selected item

Figure 83

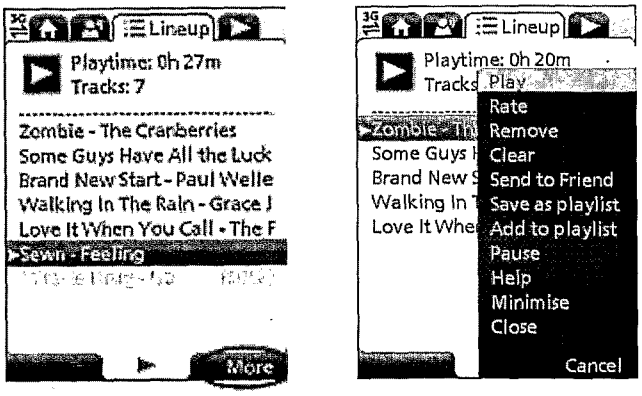


Figure 84

More option	Description
Add as Friend	Request to add a selected buzz user to your friends list.
Add to Lineup	Add an item to the end of your Lineup.
Add to Playlist	Add a track to a new or existing playlist.
Artist Profile	View information on the selected artist including star-rating, tracks that this user has downloaded from the artist and all tracks and albums from this artist.
Clear	Remove all tracks from the Lineup.
Close	Exit MusicStation.
Delete	Permanently delete an item. For example, delete a track from My Top Tracks or message from the user's Inbox.
Details	View information about a selected track or album.
Edit my profile	Edit a Buzz profile. This includes entering / editing a catchphrase, setting the profile image and configuring profile options.
Help	View context sensitive help for the selected screen.
Make Private	Make a shared playlist private. A private playlist is one that cannot be viewed by other Buzz members.
Minimise	Minimise MusicStation and place in the background (and if music is currently playing, continue playing music). The user can return to MusicStation rapidly.
Open	Open the selected item.

Figure 85

Pause	Pause the current track.
Play	Play a track on the Lineup.
Play ASAP	Play the item as soon as it has been downloaded.
Play next	Play the item after the current track has finished.
Play now	Play the item immediately. This option is only available on downloaded tracks.
Play Top Track	Add a random track from the user's top tracks to the Lineup.
Rate	Score an item. An item can be marked I Love it! Neutral or I Hate it! This contributes to the calculation of Star-rating
Reset search	Clear the search criteria from the Search text box.
Remove	Remove an item. For example remove a track from a playlist, a friend from a user's friend list or a track from the Lineup.
Save as playlist	Save the current list of tracks on the Lineup as a playlist.
Send	Send a message to a Buzz member. For example a friend request to another buzz user or a recommendation message to a friend.
Send/Receive	Send any outgoing messages in the outbox and check the server for incoming messages.
Send to Friend	Send a recommendation to selected friend(s) on a user's friends list.
Share	Make a Private Playlist available to other Buzz users. A shared playlist can be viewed and listened to by other Buzz users.

Figure 86



Figure 87

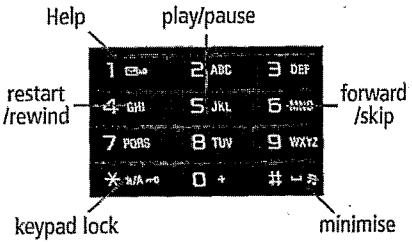


Figure 88

Key	Function
4 *Press*	Restart Current Track / Go to Previous track
4 *Press + Hold*	Rewind Current Track
5	Pause / Resume the Current Track
6 *Press*	Go to Next Track
6 *Press + Hold*	Fast Forward Current Track

Figure 89

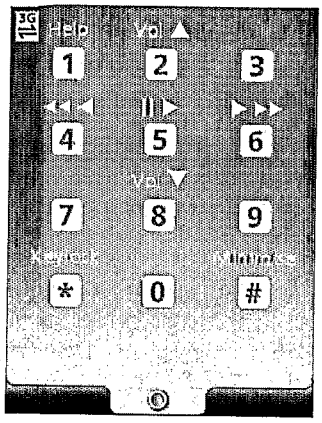


Figure 90

Key	Function
1 *Press*	Display the keypad help screen.

Figure 91

DRAWING
LEFT
BLANK

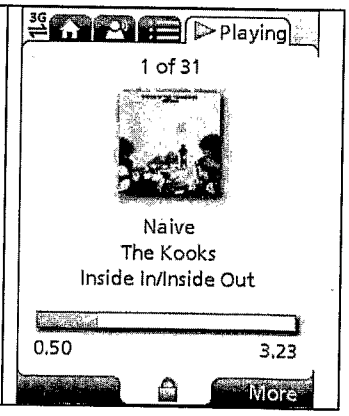


Figure 92

Key	Function
* *Press + Hold*	Lock / Unlock keypad

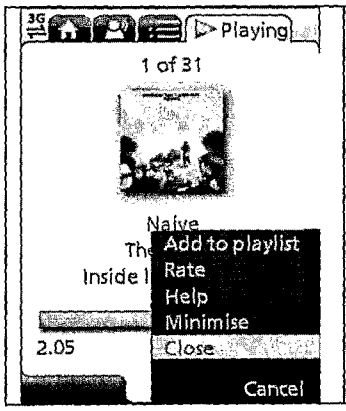
Figure 93

DRAWING
LEFT
BLANK

Figure 94

Key	Function
# Press + Hold	**Minimise MusicStation**

Figure 95



DRAWING
LEFT
BLANK

When the user selects Close from the More menu then if music is playing they will be asked whether they want

Figure 96



Figure 97

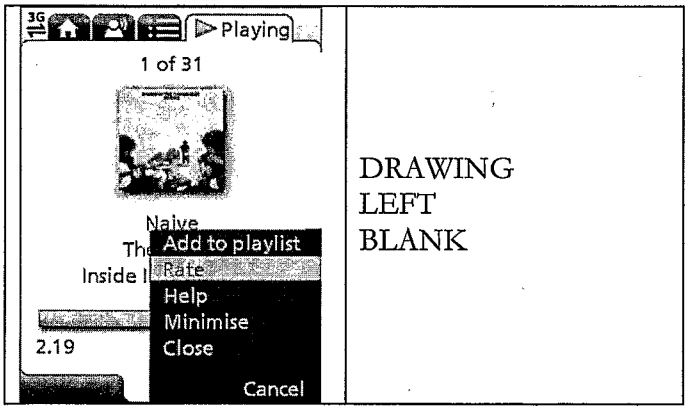


Figure 98

Home	
Menu Option	**Section**
Playlists	Error! Reference source not found.
Artists	0
Albums	Error! Reference source not found.
Tracks	Error! Reference source not found.
Charts	Error! Reference source not found.
Search	Error! Reference source not found.
Play Top Track	Error! Reference source not found.
Options	Error! Reference source not found.



Figure 99

Buzz	
Menu Option	**Section**
Buzz	Error! Reference source not found.
Inbox	Error! Reference source not found.
News	Error! Reference source not found.

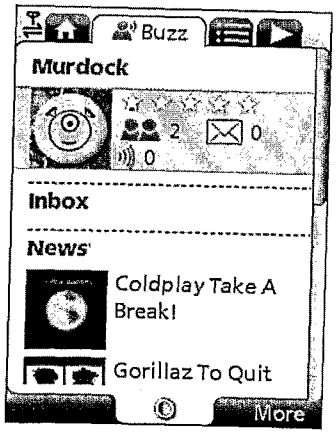


Figure 100



Figure 101



Figure 102



Figure 103

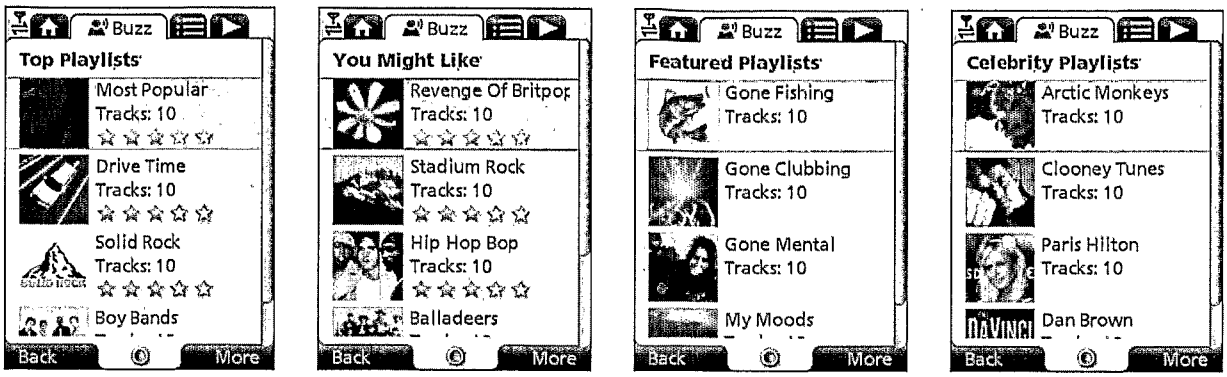


Figure 104

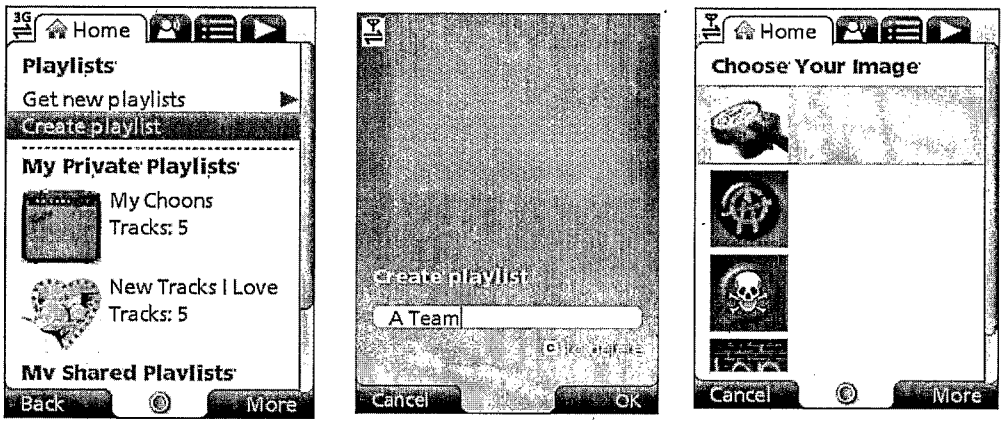


Figure 105



Figure 106

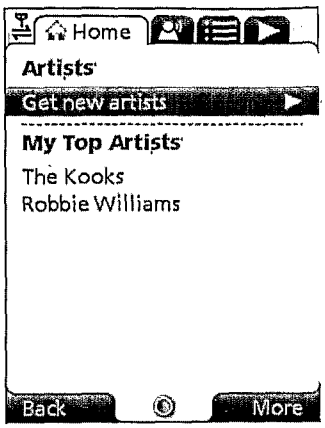


Figure 107

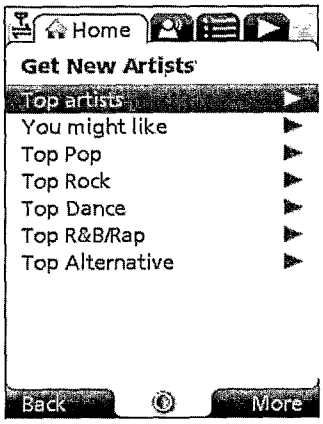


Figure 108

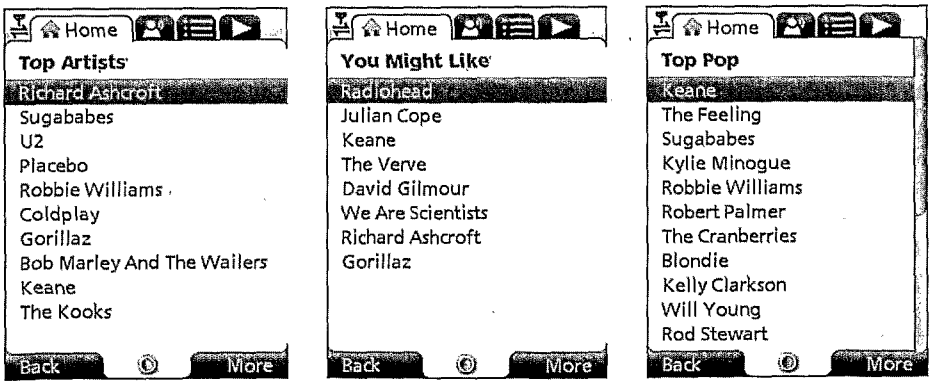


Figure 109

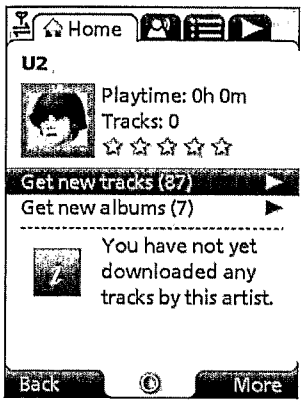


Figure 110



Figure 111

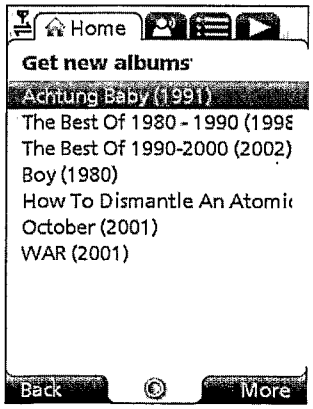


Figure 112

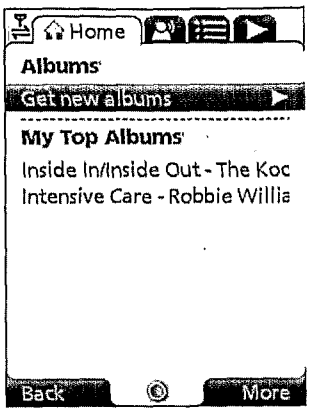


Figure 113

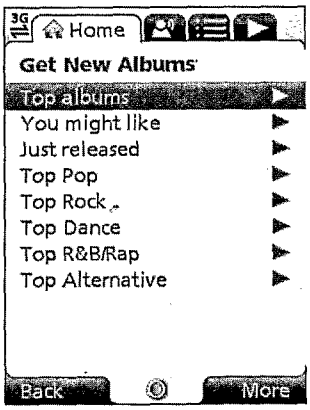


Figure 114



Figure 115



Figure 116



Figure 117



Figure 118

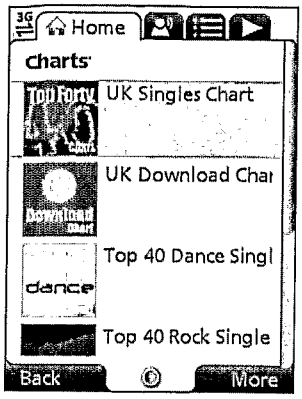


Figure 119



Figure 120

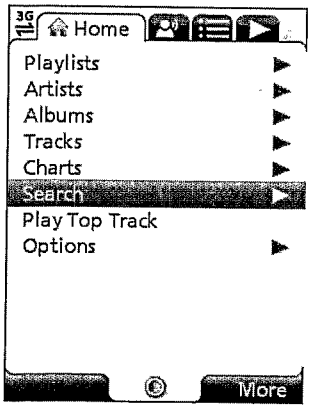


Figure 121

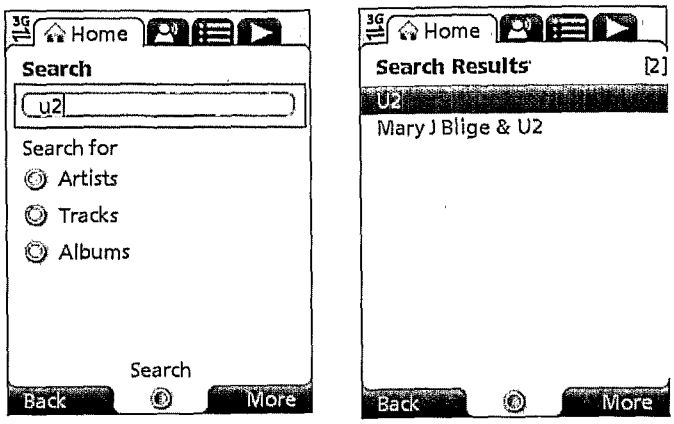


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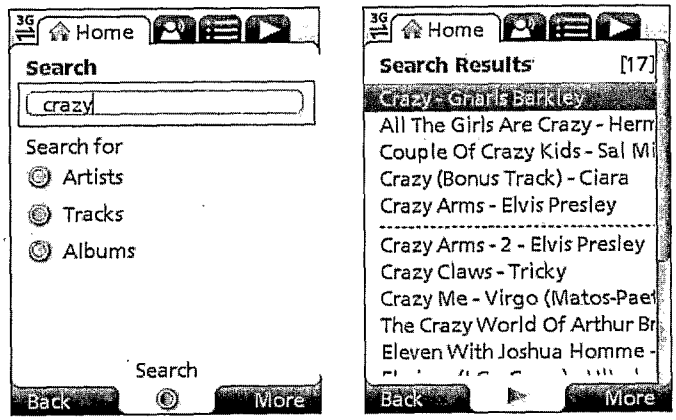


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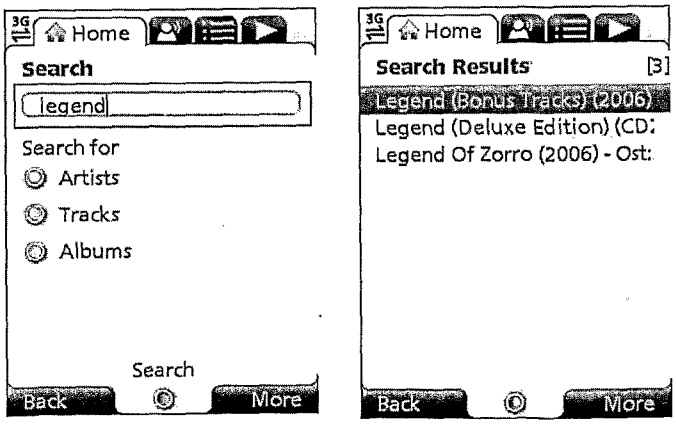


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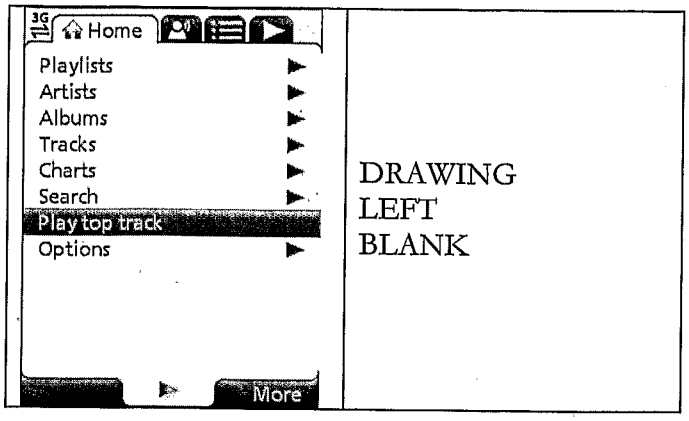


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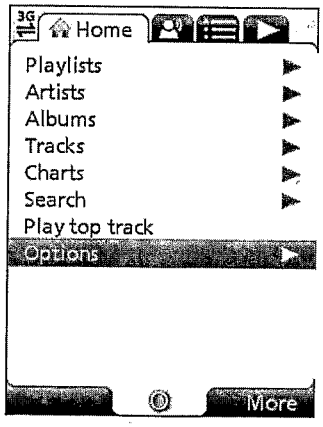


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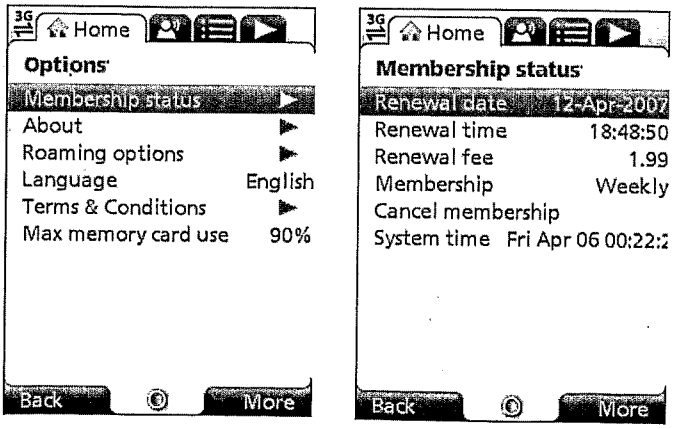


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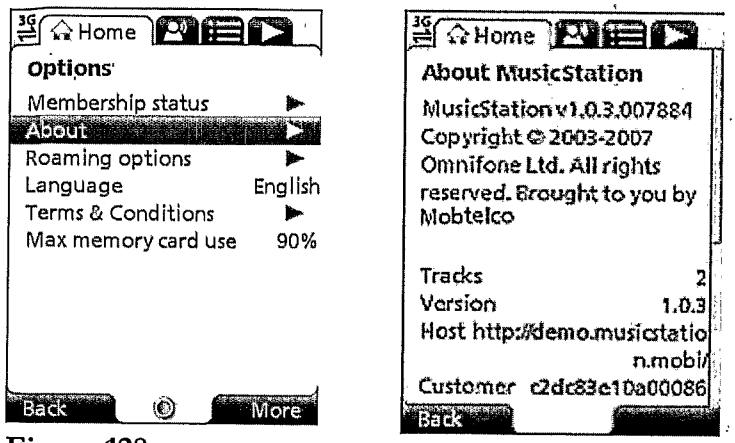


Figure 128

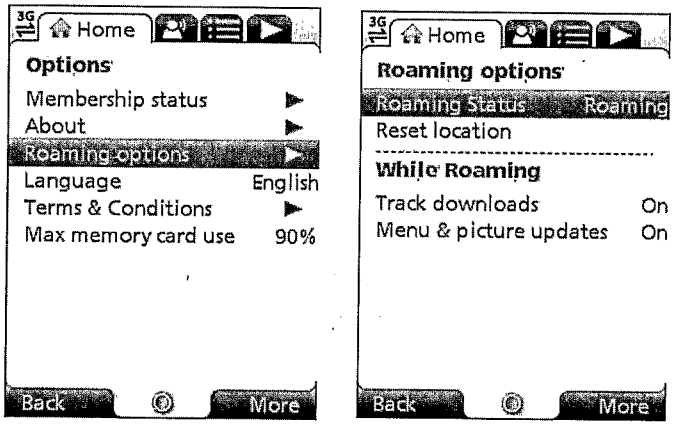


Figure 129

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Figure 130

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Figure 131

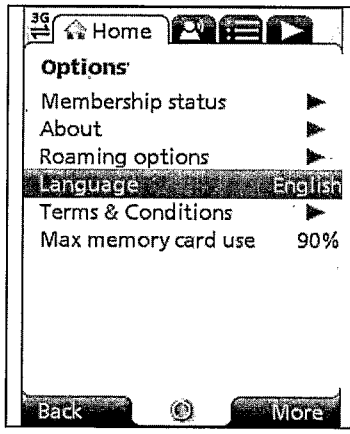
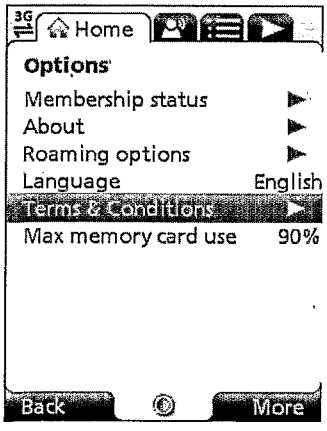
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Figure 132



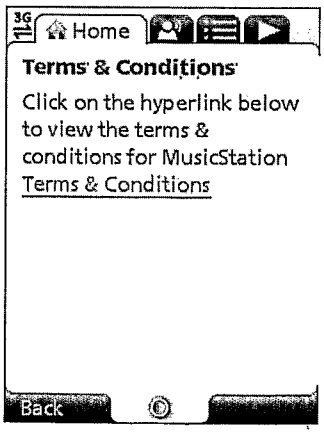


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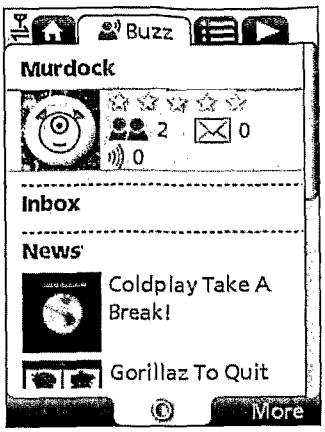


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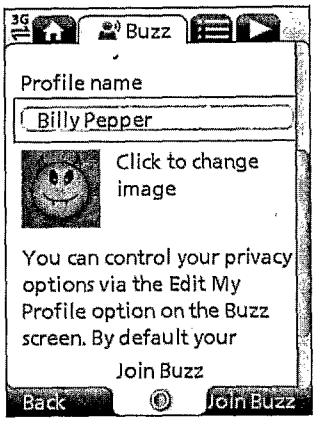


Figure 135



Figure 136

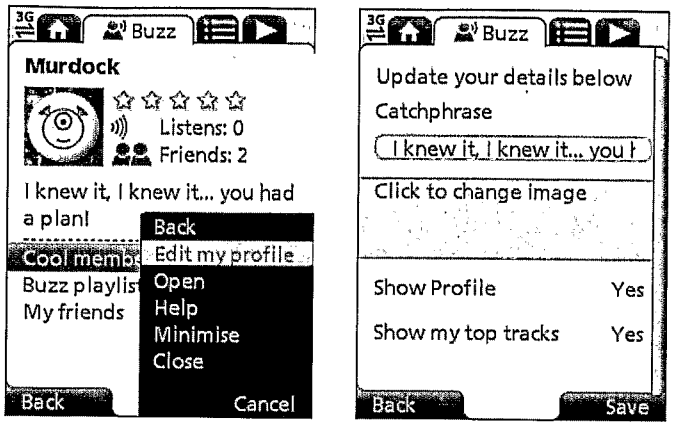


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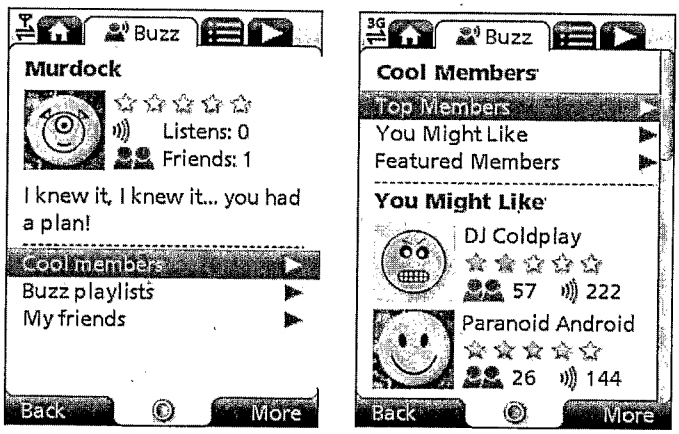


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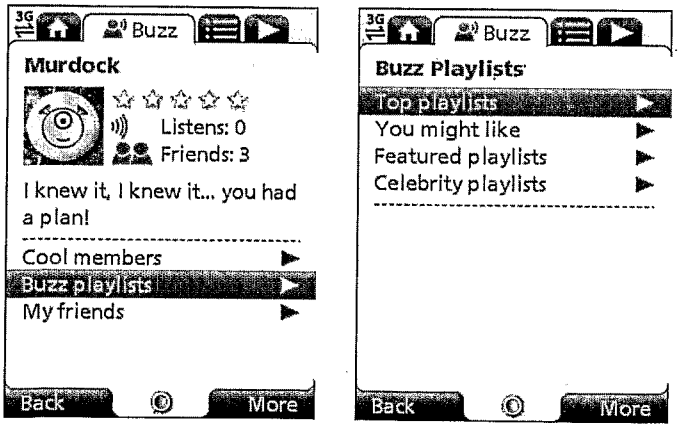


Figure 139



Figure 140

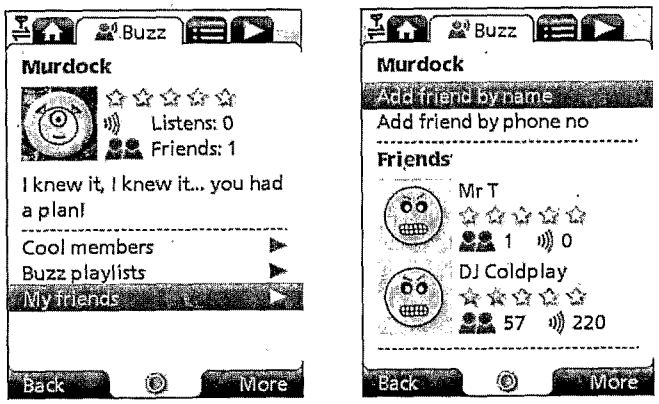


Figure 141



Figure 142

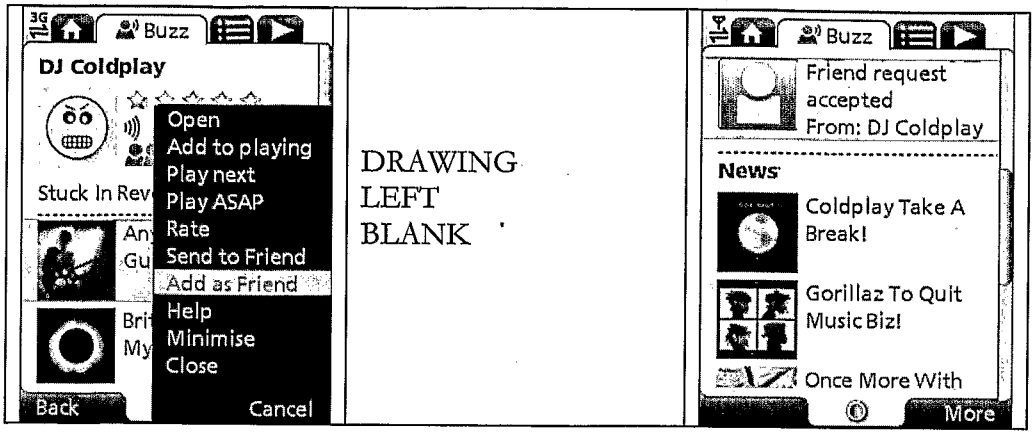


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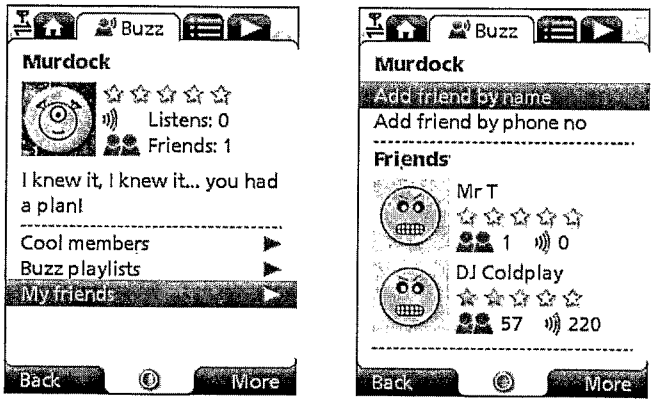


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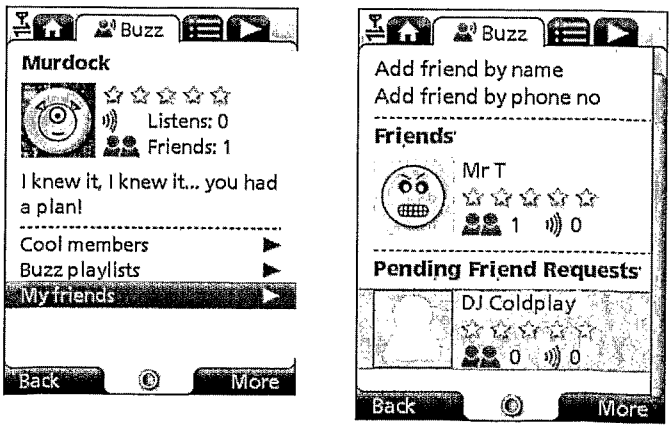


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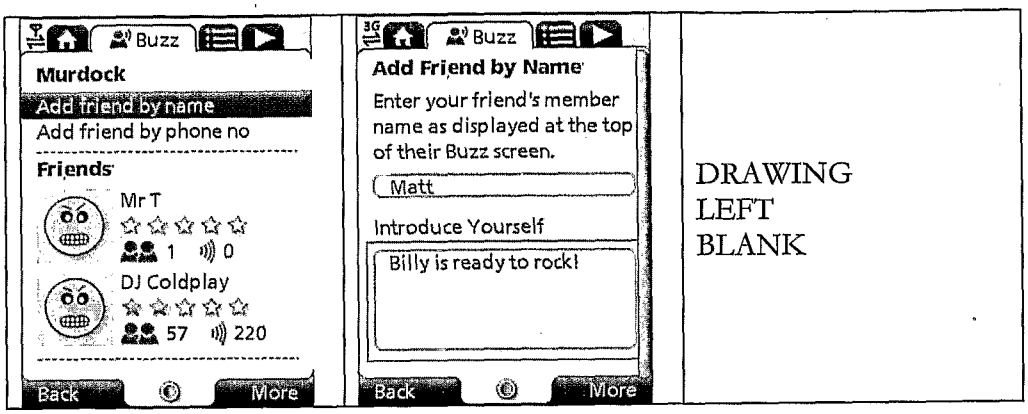


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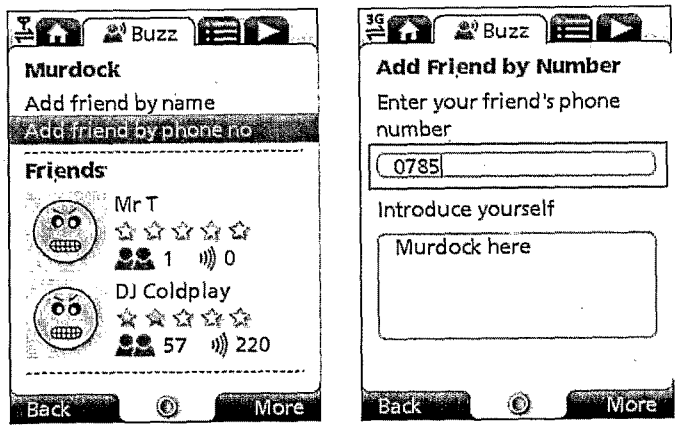
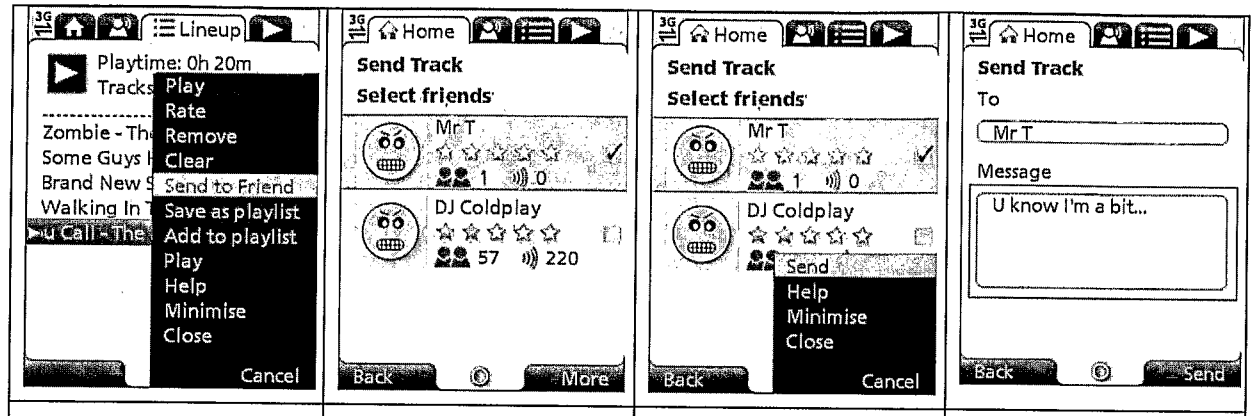
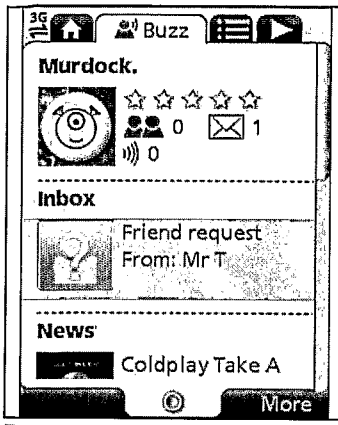


Figure 147



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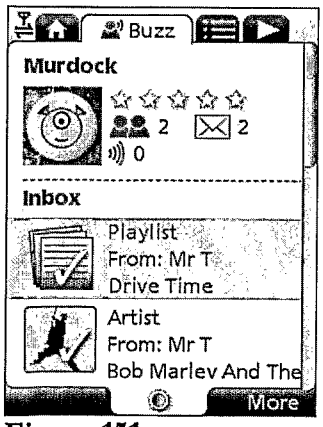
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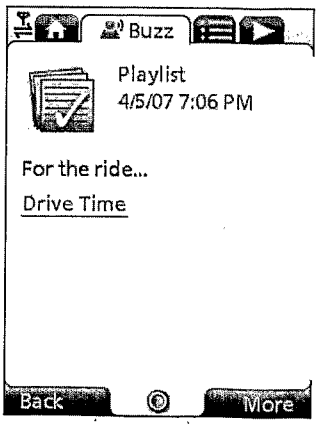
Figure 149





Figure 150





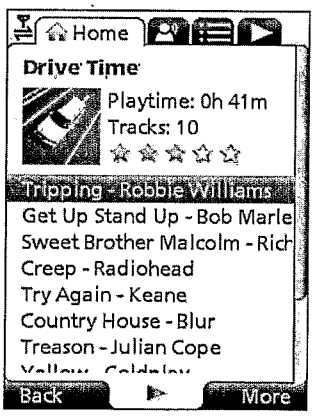


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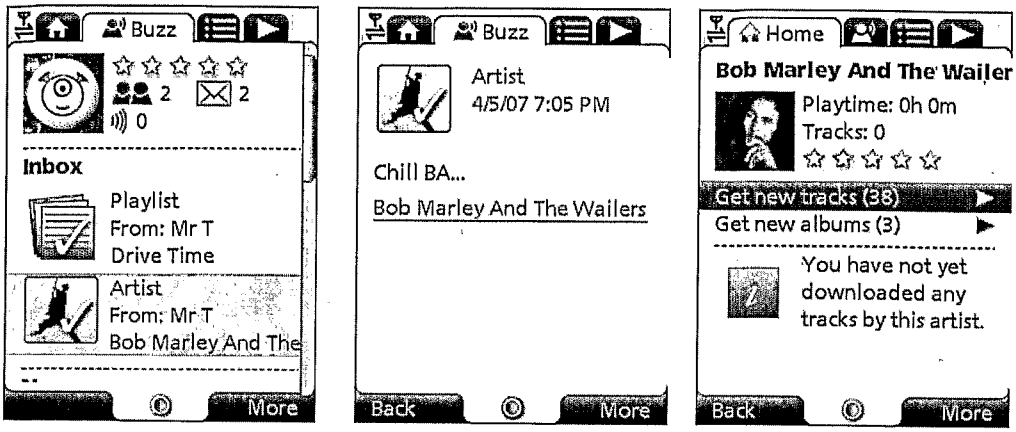


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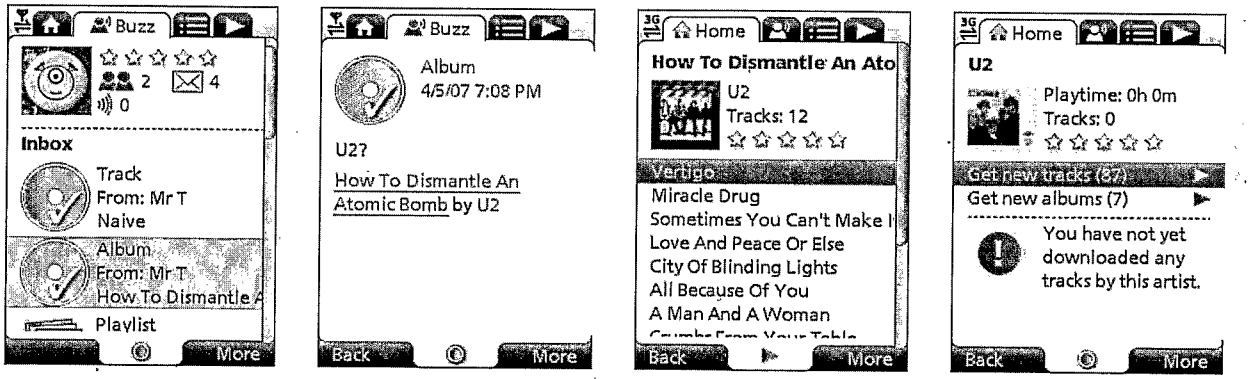


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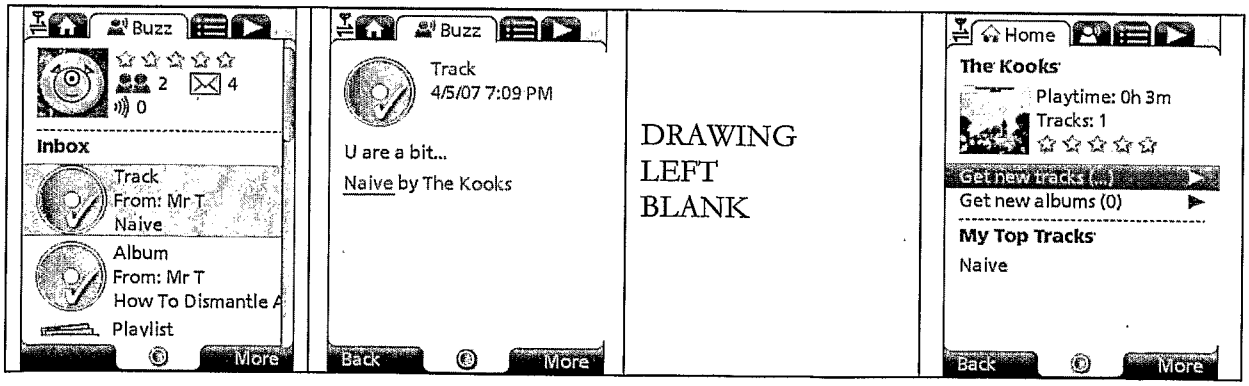


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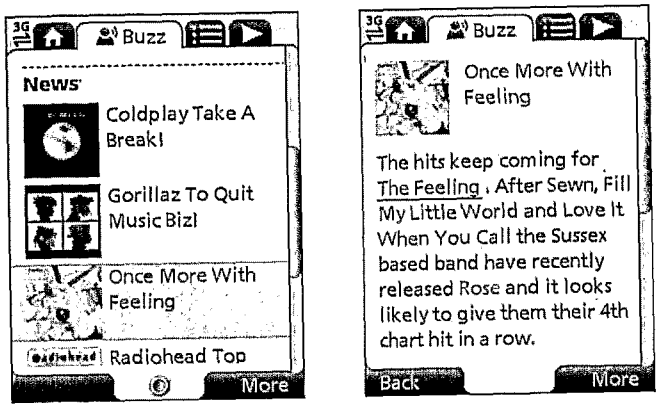


Figure 155



Figure 156

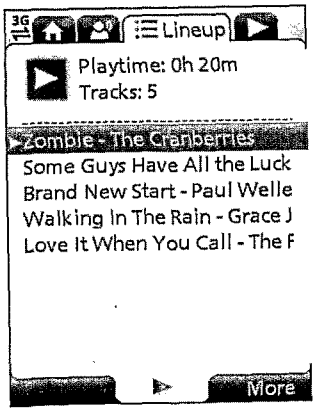


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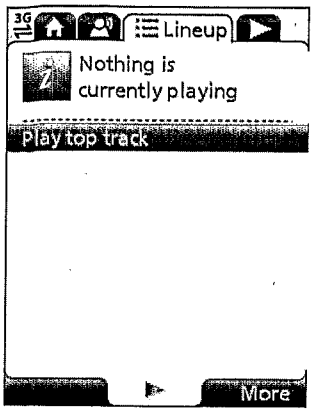


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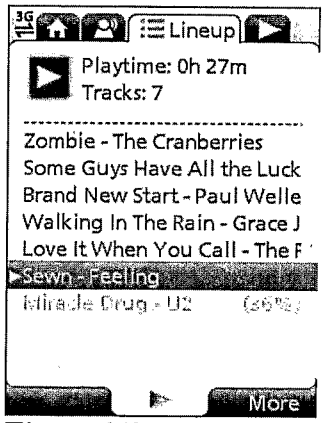


Figure 159





Figure 160

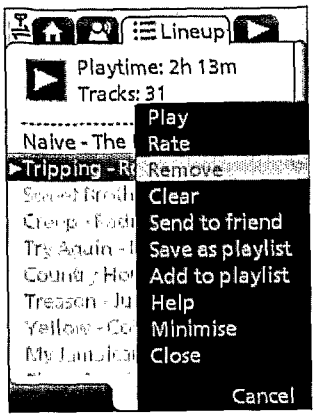


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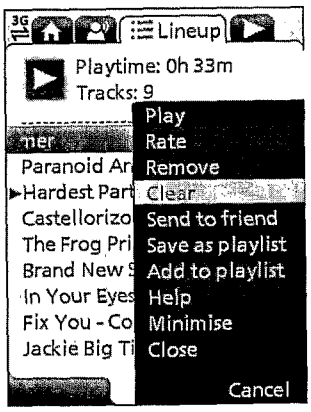


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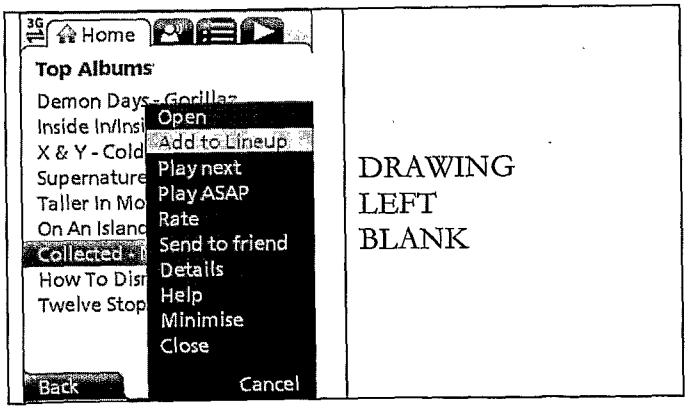


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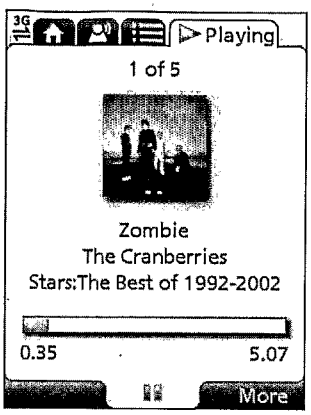

3G
Playing
1 of 5
Zombie
The Cranberries
Stars:The Best of 1992-2002
0.35
5.07
More

Figure 164

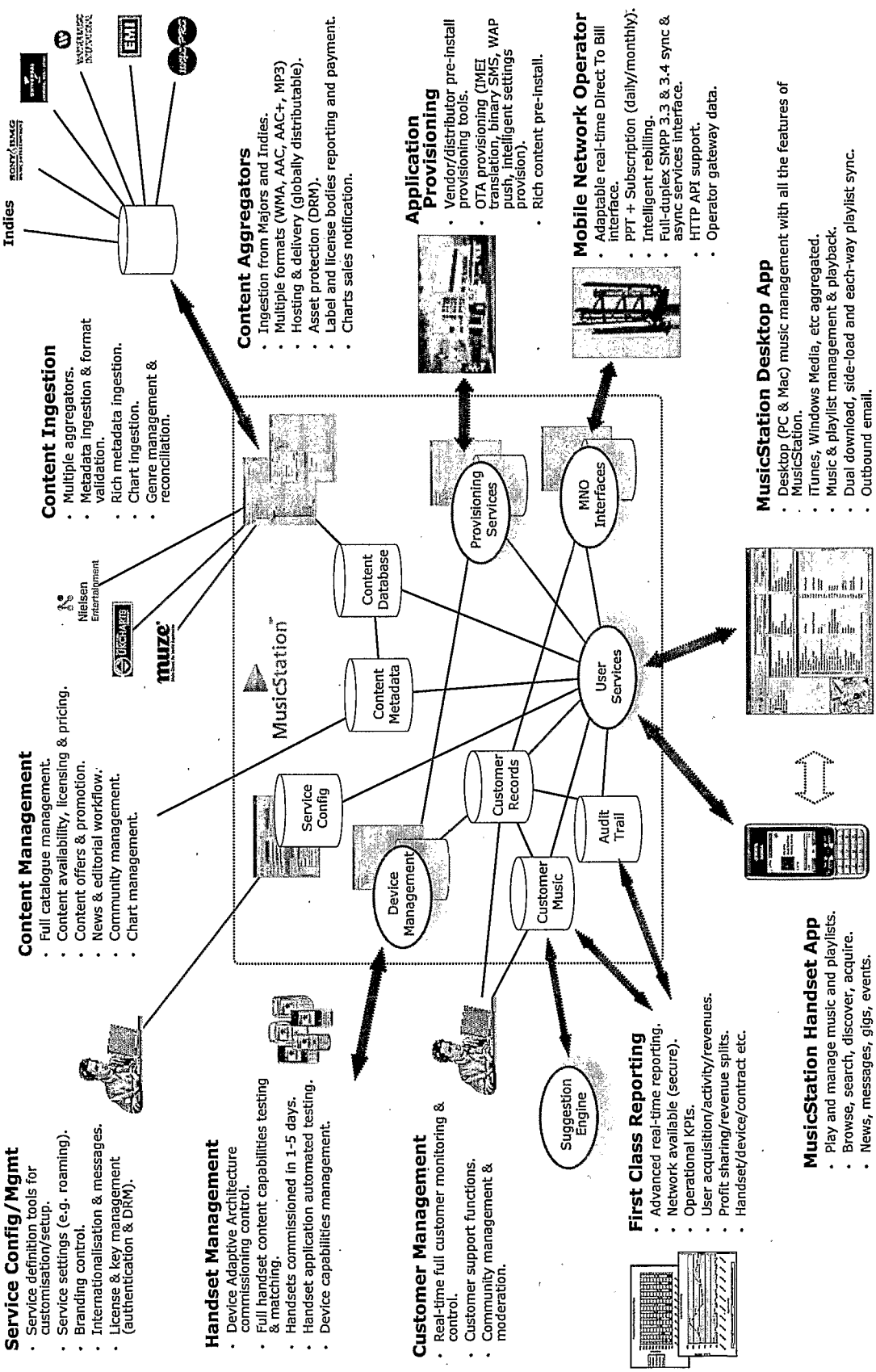

End-to-end solution
Service Config/Mgmt
Service definition tools for customisation/setup.
Service settings (e.g. roaming).
Branding control.
Internationalisation & messages.
License & key management (authentication & DRM).
Content Management
Full catalogue management.
Content availability, licensing & pricing.
Content offers & promotion.
News & editorial workflow.
Community management.
Chart management.
Content Ingestion
Multiple aggregators.
Metadata ingestion & format validation.
Rich metadata ingestion.
Chart ingestion.
Genre management & reconciliation.
Indies
Content Aggregators
Ingestion from Majors and Indies.
Multiple formats (WMA, AAC, AAC+, MP3)
Hosting & delivery (globally distributable).
Asset protection (DRM).
Label and license bodies reporting and payment.
Charts sales notification.
Application Provisioning
Vendor/distributor pre-install provisioning tools.
OTA provisioning (IMEI translation, binary SMS, WAP push, intelligent settings provision).
Rich content pre-install.
Mobile Network Operator
Adaptable real-time Direct To Bill interface.
PPT + Subscription (daily/monthly).
Intelligent rebilling.
Full-duplex SMPP 3.3 & 3.4 sync & async services interface.
HTTP API support.
Operator gateway data.
MusicStation Desktop App
Desktop (PC & Mac) music management with all the features of MusicStation.
iTunes, Windows Media, etc aggregated.
Music & playlist management & playback.
Dual download, side-load and each-way playlist sync.
Outbound email.
Nielsen Entertainment
muze
MusicStation
Content Database
Content Metadata
Service Config
Device Management
Customer Records
Customer Music
Audit Trail
User Services
Provisioning Services
MNO Interfaces
Handset Management
Device Adaptive Architecture commissioning control.
Full handset content capabilities testing & matching.
Handsets commissioned in 1-5 days.
Handset application automated testing.
Device capabilities management.
Customer Management
Real-time full customer monitoring & control.
Customer support functions.
Community management & moderation.
Suggestion Engine
First Class Reporting
Advanced real-time reporting.
Network available (secure).
Operational KPIs.
User acquisition/activity/revenues.
Profit sharing/revenue splits.
Handset/device/contract etc.
MusicStation Handset App
Play and manage music and playlists.
Browse, search, discover, acquire.
News, messages, gigs, events.
Community, shared playlists.

Figure 165