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Enabling Parallel Conversations In A Group Video Call

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Enabling Parallel Conversations In A Group Video Call

ABSTRACT

In a multi participant video conference (VC), it can be intimidating to start socializing or open a new subject. The sequential nature of microphone-passing obliges a participant uninterested in the present topic to wait it out before attempting to change topics. On the contrary, in a physical gathering, small groups of people form naturally to discuss topics of local and temporary interest, evolve, then disband. This disclosure describes techniques to simulate within VCs the natural social behavior of humans. A virtual conference hall is defined where avatars of VC-attendees are displayed. An attendee can whisper to nearby avatars. Two or more avatars can retire to a corner to discuss a topic of mutual interest. An attendee can lurk (walk through) the conference hall listening to local discussions before deciding to join one. While local discussions occur in parallel, a principal speaker may continue to address, theatre-style, all participants.

KEYWORDS

- Video conferencing
- Group call
- Video meeting
- Video gathering
- Party behavior
- Human social interaction
- Virtual conference hall
- Parallel conversations

BACKGROUND

In a multi-participant video conference (VC), it can be intimidating to start socializing or open a new subject. The sequential nature of microphone-passing and the common practice of muting all participants except the current speaker obliges a participant uninterested in the present topic to wait it out before attempting to change topics. VC applications display tiles of the participants to give participants the opportunity to take the floor. However local and unobtrusive parallel conversations are generally not possible.

On the contrary, in a physical gathering of people, small groups form naturally to discuss topics of local and temporary interest, evolve, then disband. At a physical party, when small circles of people naturally form, people do not continually maintain membership or continue talking in the same circle. Rather, they go around the room, joining and leaving circles while listening to others.

DESCRIPTION

This disclosure describes techniques to simulate within videoconferences the informality and natural social behavior of humans within physical parties or other gatherings. Conversation circles can be created within the VC. As a conversation progresses, interested users can select other users, and by mutual agreement, break off into a different circle. The people left behind find that the volumes of the just-departed people have automatically reduced, e.g., faded to a whisper, just as in physical social gatherings. If the whispers from a circle arouse a listener's interest, the listener can simply hop into that circle. An attendee can mute the conversations of particular circles, or of the main speaker. An attendee can stay where they are or move through the conference hall seeking conversations of interest, or start their own break-out circle of people.

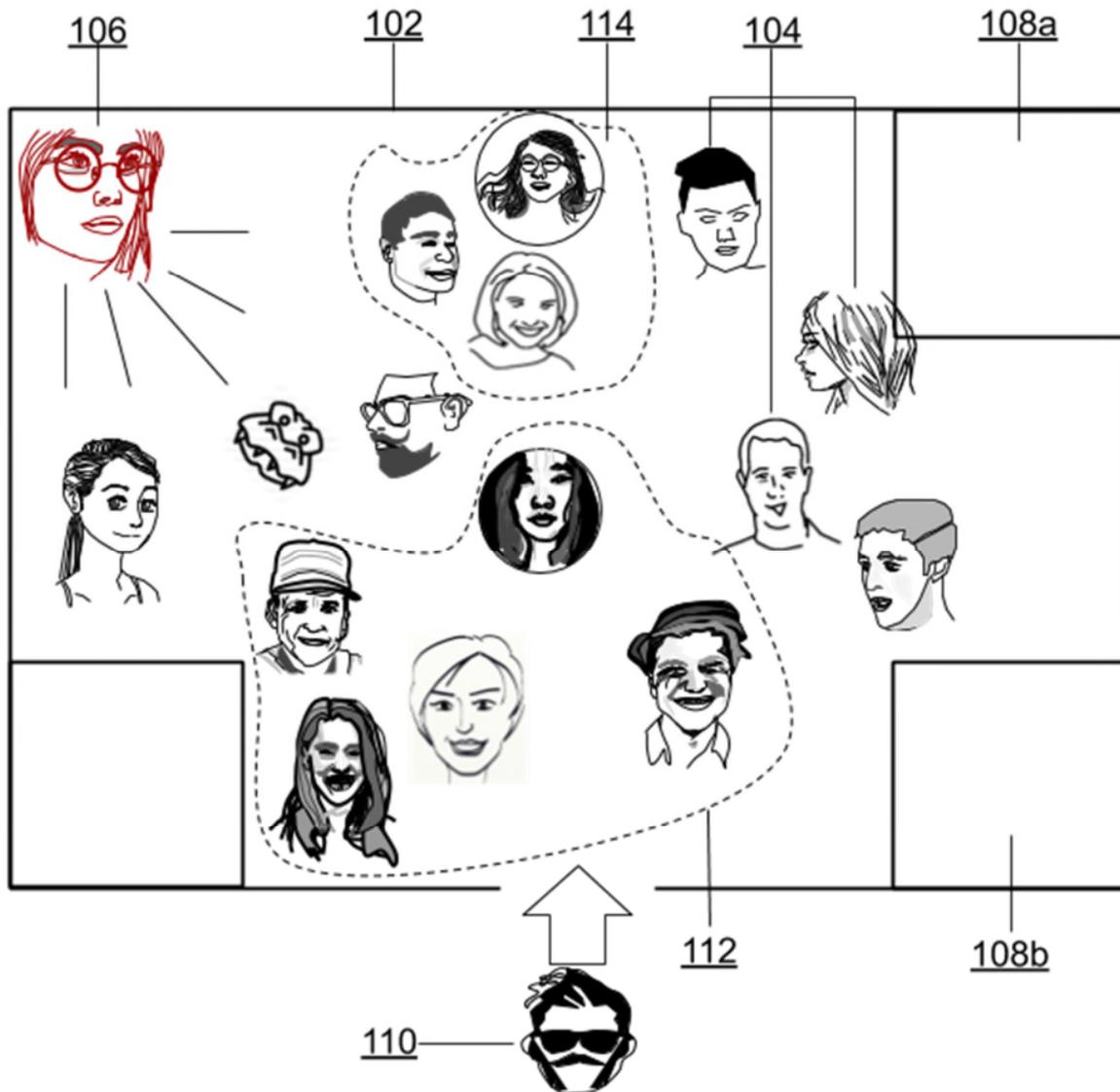


Fig. 1: Parallel conversations in a video conference

Fig. 1 illustrates parallel conversations in a video conference, per the techniques of this disclosure. A virtual conference hall (102) is defined where each attendee can see avatars (104) of themselves and other attendees. While a principal speaker (106) can broadcast to the entire set of attendees, informal and temporary circles of attendees (114) can form, based, e.g., on proximity.

Discussions within a circle are barely audible or inaudible outside the circle, but circle membership is fluid, e.g., another attendee can simply enter a circle to become part of it, or a member can simply walk out of a circle. Regardless of whether or not an attendee is a member of a circle, the attendee can enter whisper-mode, wherein their speech is audible only to nearby avatars. An attendee can increase or decrease the volume of nearby conversations relative to the volume of the principal speaker. At the time of joining, an attendee (110) can be placed in an informal welcome circle (112). Corners (108a-b) are defined where two or more attendees can retire to more intensively discuss a topic of mutual interest.

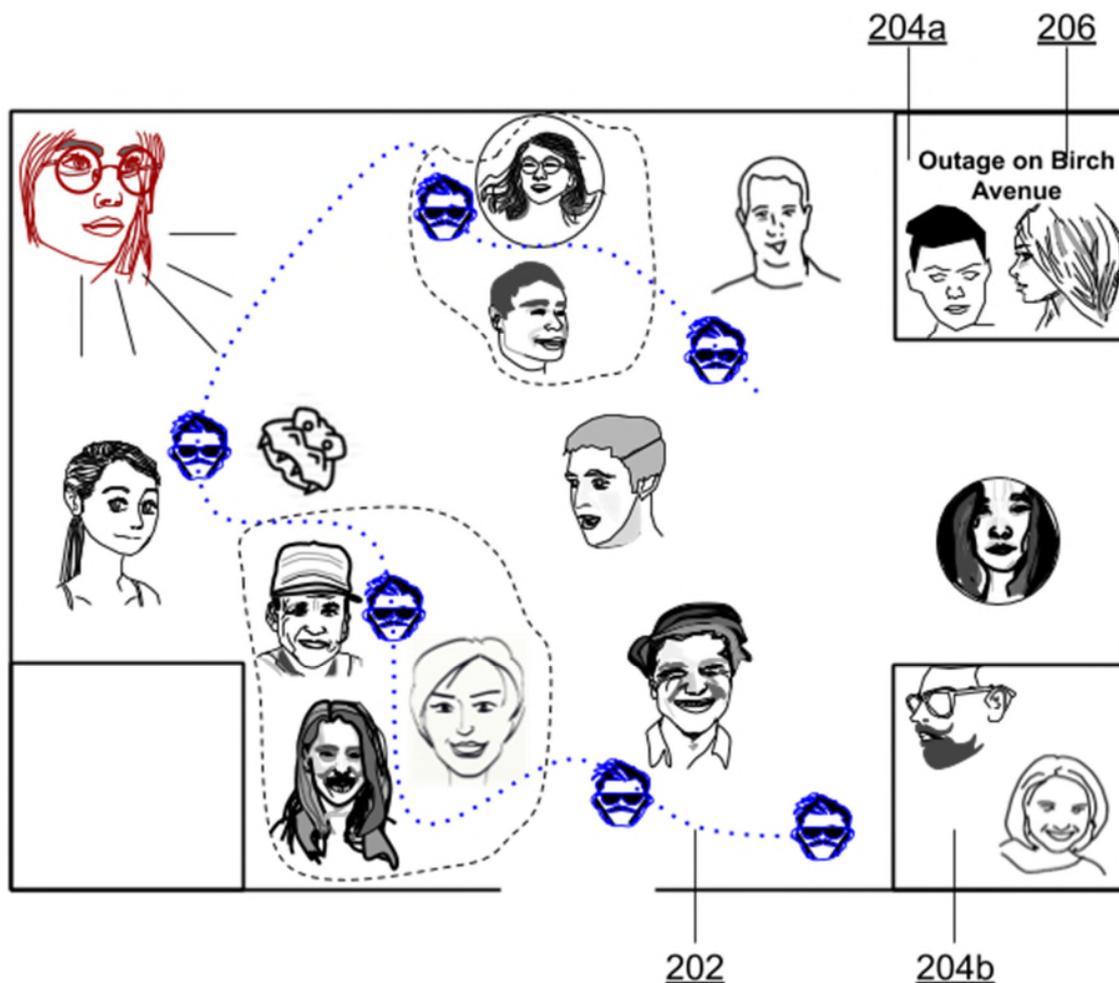


Fig. 2: Modes of parallel conversation in video conferencing. Lurking (blue line) and retiring to corners

Fig. 2 illustrates various modes of parallel conversation in video conferencing, per the techniques of this disclosure. An attendee can move or walk (202) through the conference hall listening to local discussions before deciding to join one. Such movement (or lurking near a particular discussion) allows for accidental or ambient conversations, where an attendee can hear something by simply passing by and can contribute to different conversations.

Groups of attendees can drag-and-drop themselves to corners, or nudge others to do so (204a-b) to more intensively discuss topics of mutual interest. Such attendees, who retire to a corner, can also advertise their topic of discussion (206) so that others that are interested in that topic can walk into that corner.

In addition, a shout-mode is provided, where one attendee takes audio control of the floor, muting, or becoming louder than all other conversations. The shout-mode is analogous to a drumroll, or to the tapping of a wine glass with silverware at a party, or the climbing up on a chair by a party-goer, to redirect attention to an important announcement about to be made (“we’re going to cut the cake”). Shout-mode privileges can optionally be restricted to certain attendees, e.g., the meeting organizers or administrators.

Alternative to floating avatars (as shown in Fig. 1 and Fig. 2), the traditional tiled (or windowed) interface of a multi-participant video conference can be used with the above-described modes. For example, when an attendee wants to initiate a conversation with one or just a few other attendees, they can move their tile closer to the attendee(s) with whom they seek a conversation. When the attendee speaks, rather than the entire group hearing their speech, only attendees with proximate tiles hear the speech of the attendee.

CONCLUSION

This disclosure describes techniques to simulate within video conferences (VC) the natural social behavior of humans. A virtual conference hall is defined where avatars of attendees are displayed. An attendee can whisper to nearby avatars. Two or more avatars can retire to a corner to discuss a topic of mutual interest. An attendee can move through the conference hall listening to local discussions before deciding to join one. While local discussions occur in parallel, a principal speaker may continue to address, theatre-style, all participants.